# Persistent class gaps in perceptions of political voice: Liberal democracies 1974-2016

Line Rennwald and Jonas Pontusson, University of Geneva

November 1, 2021

This paper seeks to contribute to the growing literature on unequal representation in liberal democracies by exploring how income, education and occupation affect individuals' perceptions of the extent to which the political system is responsive to their concerns and demands. Drawing on surveys fielded by the International Social Survey Program in nineteen liberal democracies between 1996 and 2016, we analyse responses to a survey question that asks respondents whether they agree or disagree with the statement that 'people like me do not have any say about what the government does.' For a subset of seven countries, we also analyse data from a cross-national survey asking the same question in 1974, allowing us to explore socio-economic correlates of perceptions of political voice over a more extended time period.<sup>1</sup>

Gilens' (2012) study unequal responsiveness in the US measures policy responsiveness by the effect of support for policy change at different points in the income distribution on the probability of policy change being adopted. Famously, Gilens finds that the preferences of high-income citizens predict policy change, but the preferences of low-income and even middle-income citizens have no influence on policy outcomes when they diverge significantly from the preferences of high-income citizens. Replicating the Gilens approach to measuring unequal representation, recent studies report strikingly similar results for Germany, the Netherlands, Norway (see Schakel 2019, Elsässer, Hense and Schäfer 2020, Persson 2020, and Mathisen *et al* 2021). Relying on different data and methods, other comparative studies show that the ideological dispositions and policy preferences of members of parliament are more closely aligned with the dispositions and preferences of affluent citizens than with low-income

<sup>-</sup>

<sup>&</sup>lt;sup>1</sup> Empirically, we extend the exploratory analysis of Lind and McCall (2020) by taking into account multiple dimensions of social class as well as paying more attention to temporal dynamics.

citizens (Giger, Rosset and Bernauer 2012; Rosset, Giger and Bernauer 2013; Rosset and Stecker 2019; Lupu and Warner 2020). In short, unequal representation by income appears to be a ubiquitous feature of contemporary democracies.

A fair critique of the 'Gilens method' is that it compares the frequency of policy wins and losses without taking into the salience of different policy proposals for different categories of citizens and also averages across policy proposals of very different scope. It could be that low- and middle-income win on most of the issues that are important to them, but high-income citizens win a wide range of issues that of secondary importance to the majority of citizens (including high-income citizens). If this were so, we would observe unequal responsiveness as measured by Gilens, but we would not expect low- and middle-income citizens to perceive themselves as more poorly represented in politics than high-income citizens. In the absence of good measures of issues salience, analysing perceptions of political voice provides a way to address this problem in the literature on unequal representation.

A second problem that we seek to address concerns the 'groups' who are represented in politics (or not). With very few exceptions, the literature operationalizes unequal representation in terms of the representation of low-, middle- and high-income citizens.<sup>2</sup> This setup is attractive in that income groups can easily be construed to be of equal size and therefore, from a normative point of view, worthy of equal political influence. However, it may lead us astray with respects to the mechanisms of unequal representation. It is likely that at least some of the unequal representation documented by Gilens (2012) and others has to do with forms of social inequality that are correlated with relative income. Indeed, recent studies that emphasize descriptive misrepresentation as a mechanism behind unequal policy responsiveness

<sup>&</sup>lt;sup>2</sup> The most notable exceptions are Elsässer, Hense and Schäfer (2020), who analyse responsiveness to the preferences of different occupational groups, and Schakel and van der Pas (2020), who analyse responsiveness to educational groups.

emphasises the educational and occupational background of elected representatives rather than their income (see, most notably, Carnes 2013 and Carnes and Lupu 2015, 2021).

Setting aside gender, race and ethnicity, we focus here on social class membership as a determinant of respondents' perceptions of themselves as being represented in politics. As we will explain shortly, we conceive of social class as a multi-dimensional concept that encompasses relative income, educational attainment and social status as well as power relations in the workplace. To anticipate, our findings indicate that educational attainment and occupation are more important determinants of perceptions of political voice than relative income. Arguably, social class understood in educational and occupational terms is more meaningful than abstract 'income groups' for respondents being asked about the political influence of 'people like me'. While many people move across the income distribution over their lifetime, educational attainment and occupation are more stable from a life-cycle perspective and therefore more likely to be a basis for social identity.

As suggested by Hense and Schäfer (2020), growing awareness of unequal representation among low-income, working-class citizens provides a plausible of the rise of populist protest parties over the last two or three decades. The obvious question becomes, have class gaps in perceptions of political voice increased over time? To anticipate, we do not find much evidence for this apparently intuitive proposition: class gaps in perceptions of political voice were already large in the mid-1970s and have been remarkably stable over time.

For reasons that we will articulate shortly, we are also interested in exploring the effects of union membership on perceptions of being represented and in exploring how class membership and union membership interact with each other. The one important change over time that our analysis uncovers concerns the effects of union membership on workers' perceptions of not being represented in politics. In the 1970s, unskilled workers and skilled

production workers who were union members perceived themselves as having more political influence than their non-union counterparts, but this is no longer the case today.

The rest of the paper is organized as follows. We begin by elaborating on the meaning of 'perceived political voice' and then explain our understanding of social class and the class structure of contemporary capitalism. In the third section, we briefly discuss why we might expect class gaps in perceptions of political voice to have changed over time. Against this background, we present the survey data that we analyse, introduce the variables included in our analyses and discuss model specifications. The empirical results are presented in two subsequent steps. First, we estimate effects of relative income, educational attainment and occupational class membership with data for 1996-2016, for individual countries as well as the entire sample of nineteen countries. Secondly, we explore temporal changes in class gaps and the effects of union membership: initially for the nineteen countries over the period from 1996 to 2016 and then for seven countries over the period from 1974 to 2016.

# Perceived political voice

As noted at the outset, the empirical analyses presented in this paper explore the role of social class as a determinant of whether survey respondents agree with the statement that 'people like me do not have any say about what the government does.' This question has been included in many American public opinion surveys over the last 50 years and the answers that it yields are commonly interpreted by students of political behaviour as indicative of individuals' sense of 'external political efficacy.' Following Balch (1974), the behaviouralist literature distinguishes between internal efficacy, which refers to belief in one's capacity to participate effectively in politics, and external efficacy, which refers to the belief that government institutions and political leaders respond to the demands of citizens who participate

in politics. A good many studies find that these two kinds of efficacy beliefs (or assessments) are correlated with each other and that they both have a positive effect on the propensity of individuals to vote and otherwise participate in politics.<sup>3</sup>

Esaiasson, Kölln and Turper (2015) argue that perceived government responsiveness should not be conflated with external political efficacy, which they characterize as 'generalized and affectively charged beliefs about the representative system' (434). Conceiving perceptions of government responsiveness as more objective assessments pertaining to specific policies and specific political actors, these authors propose survey instruments that ask respondents to rate decision-makers in terms of whether they inform themselves as to the wishes of citizens and make decisions in line with those wishes. A number of recent cross-national surveys have fielded other questions pertaining to political representation. To cite just a couple of examples, Whitefield's (2006) comparative analysis of public perceptions of political representation in post-communist states relies on a question asking respondents whether they agree that 'government acts for the benefit of the majority' (740) while Rohrschneider (2005) seeks to explain cross-national variation in responses prompted by the statement that national political institutions make sure that EU decisions 'are in the interest of people like yourself' (857).

The main reason why we stick with the 'standard external efficacy question' is that this question allows us to include more countries in our analyses and to encompass a longer time span than any other survey question about political representation or government

<sup>&</sup>lt;sup>3</sup> See Arzheimer (2008) for a convenient literature review. The standard practice in this literature is to create an index of external political efficacy based on answers to the survey question we use here and a second question, asking respondents whether they subscribe to the statement 'I don't think public officials care much what people like me think.' Some recent contributions to the 'Americanist' literature seek to explain variation in external efficacy across individuals and over time: of particular interest for our present purposes, Norris (2015) leverages variation across US states to argue that income inequality reduces mean levels of external efficacy.

responsiveness of which we are aware.<sup>4</sup> In addition, we believe that the formulation of this question is well suited for our purposes in that it asks respondents to identify themselves as members of a segment of the population ('people like me') and then to assess the extent to which this segment—as distinct from citizens in general or the majority of citizens—wields political influence. Whether or not social class is a meaningful social identity for survey respondents remains an open empirical question.

In estimating the effects of social class and other individual-level characteristics on the respondents' propensity to agree that 'people like me do not have any say about what government does,' we control for their subjective assessments of their own ability to understand and participate in politics (i.e., their sense of 'internal efficacy'). That said, we hasten to stress that responses to the external efficacy question do not necessarily reflect reasoned assessments of how they political system works. To the extent that workers perceive themselves as having less say in politics than middle-class professionals, it may be that they are simply projecting their experience of everyday social interactions, at work or any number other arenas, onto the political domain. We shall return to this point shortly.

### Social class revisited

As we explain below, we rely on occupational codes as the primary instrument to identify social classes. More specifically, we rely on the coding scheme proposed by Oesch (2006) to identify five large classes of contemporary capitalist societies: four classes of employees--the routine working class, the skilled working class, the lower middle class and the

<sup>4</sup> The surveys that include this question also allow us to operationalize social class membership in an appropriate manner.

6

upper middle class—and a fifth class consisting of self-employed people and small business owners. Conceived as an update of the class schema developed by Erikson and Goldthorpe (1992), the Oesch class schema involves two dimensions: a vertical dimension on which classes are distinguished by skill levels and the marketability of skills; and a horizontal dimension on which (some) classes are distinguished by 'work logics' or, in other words, the type of work that people perform. The combination of these two dimensions yields a total of 16 small classes. In due course, we will distinguish between production workers and other workers, but we focus on vertical class distinctions. We do so to reduce complexity and to preserve statistical power, but also because vertical class distinctions seem more relevant for our present purposes than Oesch's horizontal class distinctions. While there are good reasons to suppose that 'work logics' affect people's policy preferences (Kitschelt and Rehm 2014), we cannot think of any obvious reasons why, for instance, technical professionals (say, engineers) would perceive themselves as more or less politically influential than socio-cultural professionals (say, schoolteachers).<sup>5</sup>

As Oesch (2021) points out, the vertical dimension of the Oesch class schema generates occupation-based class categories that are very similar to the occupation-based class categories of Erickson and Goldthorpe (1992). It is not an objective of this paper to assess the relative strengths and weaknesses of the different operationalizations of social class. More importantly, it should be noted that we conceive of social class as a multi-dimensional concept that is, at best, proxied by occupational categories.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> It is hardly necessary to point out that the Oesch class schema (with its two dimensions) is the current 'industry standard' among students of comparative European politics interested in the effects of social class on policy preferences and voting behaviour (e.g. Häusermann and Kriesi 2015; Ares 2020; Rennwald 2020). The five-class schema employed here is the same as that of Oesch and Vigna (2021), who track over-time changes in subjective social status by class.

<sup>&</sup>lt;sup>6</sup> In this respect, the concept of social class, as we understand it, resembles the concept of socioeconomic status ('SES') as employed in studies of political behaviour (e.g., Schlozman, Verba and Brady 2012).

Seeking to synthesize different strands of sociological literature on social class, we posit that the routine working class, the skilled working class, the lower middle class and the upper middle class can be distinguished from each other on four basic dimensions.<sup>7</sup> The first dimension pertains to economic resources or, in other words, income and wealth. As we move up the class ladder, savings and ownership of real-estate as well as financial assets tend to increase, along with earnings from employment, and so does the size of inter-generational transfers of wealth. The second dimension pertains to marketable skills and lifetime mobility prospects or, in common parlance, 'career prospects.' The middle classes are distinguished from the working classes by professional qualifications and by greater opportunities for upward mobility (in terms of job status and renumeration) within as well as between companies or other organisations. Career prospects also serve to distinguish skilled workers from routine workers and professionals from semi-professionals. Thirdly, the working conditions of people who belong to these social classes differ markedly, even though they are all, formally, employees. Following Wright (1998), the crucial distinctions here are between individuals who work autonomously, those who supervise others, and those who are (closely) supervised. Finally, social status and social networks ('human capital') constitute an important dimension of social class, extending its implications beyond work and labour-market experiences to encompass social interactions in the domains of leisure, parenting, healthcare, public administration, law enforcement and the like.

In what follows, we will present the results of estimating the effects of social class membership proxied by occupation while controlling for individual-level covariates that are not themselves proxies for social class (e.g., gender and age). We will also present the results of estimating models that include relative household income and educational attainment alongside

-

<sup>&</sup>lt;sup>7</sup> This paragraph draws Wright (1998) and Savage (2015) as well as Oesch (2006) and Erickson and Goldthorpe (1992).

social class membership proxied by occupation. Rather than conceiving the latter exercise as a horserace between social class, income and education, we see it as a way to identify, however imperfectly. the effects of different dimensions of social class. In our conceptualization, relative household income captures class differences in the economic resources while educational attainment captures class differences in lifetime mobility prospects and, at least to some extent, class differences in social status. If we still find effects of social class when we add income and education to our baseline model, these effects likely have something to do with social class as lived experience in the realm of work.

Against this background, why should we expect routine workers to perceive themselves as less well represented by comparison with upper-middle-class professionals? We should not exclude the possibility that routine workers who keep a 'running tally' of policy outputs rationally conclude that governments commonly that decisions that run against their wishes while upper-middle-class professionals conclude, by the same process, that government decisions commonly conform to their wishes. Yet this line argument demands an awful lot from ordinary citizens. It seems more plausible to suppose that citizens observe, more or less accurately, that politicians and political parties pay attention to resourceful citizens or resourceful groups of citizens, perhaps perceived as potential contributors to political campaigns, and that low-income citizens will take this to mean that they have little say in what government does while affluent citizens will draw the opposite conclusion. In a similar vein, and more directly linked to social class understood in educational or occupational terms, many citizens are surely aware that most candidates for public office have university degrees and, very often, some kind of professional background. Again, it does not seem far-fetched to suppose that routine workers will conclude from this observation that they are not well represented in politics (or listened to by elites) while upper-middle-class professionals will draw the opposite conclusion. On the other hand, corporate lobbying of government officials and

parliamentarians, let alone outright corruption, might be perceived by professionals and as workers alike as implying lack of political voice for 'people like me.'

As suggested above, class gaps in perceptions of political voice might arise without any individuals giving much thought to the question of where politicians come from or how politics. Medical doctors, university professors and lawyers enjoy high social status and are used to be listened to in the realm of work and in social settings as well. Quite plausibly, such individuals might find it difficult to assert that politicians would not listen if they chose to express their views on pressing political questions. Similarly, routine workers subject to close supervision might simply project their sense of being powerless at work onto their perceptions of the political system. To the extent that individuals engage in projections of this kind, we should expect class gaps in perceptions of political voice to be similar across contexts—countries or time periods—characterized by objective differences in the extent of unequal responsiveness by social class (including unequal responsiveness by income or education).

#### Change over time

As indicated at the outset, a key objective of this paper of this paper is to assess whether class gaps in perceptions of political voice have over time. We first do so by analysing data for 19 countries over the period from 1996 to 2016 and then, a second step, explore changes in class gaps from the mid-1970s to the mid-2010 for a subset of seven countries. In both analyses, we treat class membership as a 'synthetic variable' encompassing all four of the dimensions of social class discussed above. (In other words, the results are based on models that do not include household income and educational attainment).

For lack of survey data on citizens' policy preferences prior to the 1980s or 1990s, the literature on income or class bias in policy responsiveness has not been very attentive to temporal change,8 but many of the explanations of unequal responsiveness proposed in this literature suggest that political inequality has increased along with economic inequality over the last three or four decades. As electoral turnout fell significantly in many countries over the 1980s and 1990s, the gap in electoral turnout by educational by education attainment increases across Western Europe (see Armingeon and Schädel 2015) and it seems safe to assume differences in turnout by income and occupation also increased. Union decline represents another pervasive trend that would lead us to expect that unequal representation has increased and that working-class citizens, in particular, feel less well represented today than they did in the 1970s or 1980s. Historically, unions have not only mobilized working-class citizens to vote, but also served as a counterweight to lobbying by corporate interests and wealthy citizens in the domain of legislative politics and executive decision-making (Pontusson 2013). Finally, it appears to be the case that the 'political class' has become more exclusively university-educated and trade-union officials have become less likely to pursue political careers in most of the countries included in our analyses (see Best 2007; Alexiadou 2016; Bovens and Wille 2017; Pilotti et al 2021). In conjunction with changes in electoral participation and interest-group politics, these changes in the recruitment of elected representatives have arguably contributed to the political marginalization of the working class.

\_

<sup>&</sup>lt;sup>8</sup> Elsässer (2018) represents a noteworthy exception: based on data going back to the early 1980s, Elsässer finds that German legislators have always been less responsive to the preferences of working-class citizens than to the preferences of middle-class professionals and small business owners. Gilens (2012) presents evidence suggesting that government policy in the US was less responsive to the preferences of affluent citizens in the 1960s than in the time period covered by his main analysis (1981-2002), but it does not appear to be the case that policy was more responsive to the preferences of low-and middle-income citizens in the earlier period.

The key explanatory variables identified by the literature on unequal representation by income or class are slow-moving variables and we would expect the effects of changes in these variables on class gaps in perceptions of political voice to be incremental. Drawing on earlier literature in comparative political economy, an alternative view posits that the 1980s marked an abrupt change in the distribution of power among social classes. What we have in mind here is the idea that the trentes glorieuses involved institutionalized class compromise or, in other words, a 'post-war settlement' that incorporated the working class and its organized representatives through the expansion of the welfare state and various forms of corporatist interest intermediation. As Margaret Thatcher so clearly recognized, the Keynesian policy paradigm of the 1960s and 1970s rendered governments vulnerable to strike activity and other forms of worker disruption by positing that the macroeconomy would be managed through bargaining with unions rather than fluctuations in the rate of unemployment. By all counts, the early 1980s represents a major turning point in this regard, not only in Thatcherite Britain (and Reaganite America) but across the OECD world, with governments henceforth abandoning full employment as a policy objective and increasingly relying on monetary policy, implemented by independent central banks, rather than incomes policy to keep inflationary pressures in check. The details of this shift in macroeconomic policy paradigms need not concern us here. Suffice it to say that the standard interpretation of the shift from 'Keynesianism' to 'neoliberalism' leads us to expect that workers, especially unionized workers, experienced a decline in their political influence from the mid-1970s to the mid-1990s.

Closely related to our interest in change over time, our analyses explore how union membership affects people's perceptions of being represented in politics. As a baseline, we hypothesize that unions may have two countervailing effects on members' perceptions of their

<sup>&</sup>lt;sup>9</sup> The relevant literature includes, most notably, Scharpf (1991), Hall (1993), Blyth (2002) and Baccaro and Howell (2017).

political influence. On the premise that union members identify with policy proposals (or demands) put forth by unions and that unions wield some sway over policy makers, the first hypothesis is that union members perceive themselves as having more political influence than non-union respondents. There is, however, another possibility, namely that rhetoric and practices of unions make their members more aware of political as well as economic inequality and therefore more prone to agree with the statement that 'people like me don't have any say about what government does.' An obvious question that arises is whether the relative importance of the two effects varies depending on the class affiliation of union members. Most importantly, we seek to assess whether or not the effects of union membership on the perceptions of working-class citizens have changed over time. The comparative political economy literature mentioned above leads us to expect that unionized workers perceived themselves as having more political influence in the mid-1970s than they do today.

#### Data, variables and model specifications

The International Social Survey Programme (ISSP) has fielded five surveys that included the question about not having 'any say about what government does' since 1996, three in the 'Role-of-Government' module (1996, 2006, 2016) and two in the 'Citizenship' module (2004, 2014). Our analysis of ISSP data for this time period encompasses all countries that satisfy the following criteria: (a) they can be characterized as liberal democracies, (b) they participated in at least two surveys, and (c) their surveys include sufficient information about respondents' occupation Oesch's operationalization of social classes. This makes for a sample

<sup>&</sup>lt;sup>10</sup> See Mosimann and Pontusson (2017, 2020) on the effects of union membership on attitudes towards income inequality and redistribution.

of 19 countries.<sup>11</sup> Analysing changes over time, we pool data for 2004 with data for 2006 and data for 2014 with data for 2016, so that we end up with three temporal observations (1996, 2004/6 and 2014/6). To explore changes in perceptions of being represented over a longer time span, we supplement ISSP data with data from the 1974 Political Action Survey.<sup>12</sup> Due to data availability, this analysis is restricted to seven countries: Austria, Finland, Germany, Great Britain, the Netherlands, Switzerland and the United States. Because Austria, Finland and the Netherlands did not participate in the 1996 ISSP survey, the three temporal observations in this analysis are 1974, 2004/6 and 2014/6. As the Austrian Political Action Survey of 1974 did not ask about union membership, we replicate the analysis with and without Austria.

All our analyses are based a binary distinction between respondents who agree with statement (either strongly agree or simply agree) and those who do not agree. Simply put, we estimate logistic regression models that tell us how the independent variables affect the probability that a respondent will to some extent agree with the statement that 'people like me do not have any say about what government does.' The ISSP surveys invited respondents to express their views in terms of a five-point Likert scale running from 'agree strongly' to 'disagree strongly' via 'agree,' 'neither agree nor disagree' and 'disagree.' In the 1974 Political Action Survey, by contrast, the (neutral) middle response category was not included as option. We include respondents who chose the middle response category among those who do not agree with the statement when we analyse only ISSP data, but we drop these respondents when we pool data from the ISSP and the Political Action Survey.<sup>13</sup>

<sup>&</sup>lt;sup>11</sup> Australia (5 surveys), France (5), Germany (5), Great Britain (5), Norway (5), Spain (5), Sweden (5), Switzerland (5), United States (5), Denmark (4), Finland (4), New Zealand, Belgium (3), Canada (3), Ireland (3), Netherlands (3), Austria (2), Iceland (2) and Portugal (2).

<sup>&</sup>lt;sup>12</sup> All data were downloaded from the GESIS Data Archive

<sup>(</sup>https://search.gesis.org/research\_data/ZA0765 and https://www.gesis.org/en/issp/home).

Whether Likert scales should include the neutral option has been the subject of some debate among survey researchers (see Menold and Bogner 2016). As reported in the online appendix (Figure A3), the ISSP-based results do not change significantly if we drop respondents who chose the middle category.

As indicated above, the independent variables of theoretical interest are social class, relative income, education and union membership. We operationalize social class by assigning respondents to one of Oesch's 16 small classes and then aggregate these small classes to form 5-7 large classes (depending on the model being estimated). The initial assignment to Oesch's small classes is based on three variables: occupation (ISCO codes), employment status (employee, self-employed or employer) and, for employers, the number of employees (employers with more than 9 employees being coded as 'large employers'). While 4-digit ISCO-88 and ISCO-08 codes readily allow for the operationalization of the Oesch class schema with ISSP data, the 1974 Political Action Survey includes 3-digit ISCO-68 codes that we have translated into 4-digit ISCO-88 codes.<sup>14</sup> Because national surveys within ISSP as well as the Political Action Survey differ in whether or not (or how) they assign occupational status to retired people, spouses without an employment history and the unemployed, we restrict all of our analyses to respondents who are currently in paid work.<sup>15</sup> In aggregating Oesch's small classes into larger classes, we collapse the self-employed and small business owners into one class ('small business') and assign 'large employers' (a very small category of survey respondents) to the 'upper middle class.' Thus we end up with all respondents in paid work being categorized as members of one of the five large classes mentioned earlier: the routine working class, the skilled working class, the lower middle class, the upper middle class and 'the small business class' (or, less awkwardly, the *petite bourgeoisie*). 17

<sup>&</sup>lt;sup>14</sup> Additionally, national occupational classification schemes used in the 1996 Swedish and British surveys were converted into ISCO codes (and supplemented with educational background for Great Britain).

<sup>&</sup>lt;sup>15</sup> Having excluded respondents with missing values on our variables of interest as well as the retired, spouses and the unemployed, our pooled ISSP dataset consists of 47,059 respondents. The corresponding number is 5,563 for the Political Action Survey (with Austria).

<sup>&</sup>lt;sup>16</sup> As the number of employees is not available for Norway, Spain and the US in 1996, large employers are included in the small-business class in these cases.

<sup>&</sup>lt;sup>17</sup> Table A.1 in the online appendix provide survey-based estimates of the relative size of these five classes in 1974, 1996 and 2016.

The income variable used in our analyses of ISSP data is based on self-reported disposable household income. The wording of income questions and response formats vary across national surveys carried out within the framework of the ISSP, but all these surveys end up placing respondents in a set of income bands. Following the industry standard among scholars using ISSP or ESS data to explore the effects of relative income on policy preferences and voting behaviour, we assign respondents to income quintiles in their countries based on the mid-point of their income band weighted by the size of their household. Educational attainment is based on respondents' completed education level, harmonized to consist of three categories: lower secondary education, upper secondary and post-secondary education and tertiary education. Finally, union membership is a dummy variable that takes the value of 1 if the respondent is a union member, otherwise zero.

In addition to the independent variables of theoretical interest, the models that we estimate include four individual-level control variables. We control gender and age without strong prior expectations as to their effects on perceptions of political voice. More importantly, our models control for 'internal efficacy' or, in other words, self-assessed capacity to participate in politics. As noted above, many studies have shown that individuals who perceive themselves as politically capable are more likely to think that the political system is responsive. We want to net out this effect to assess whether members of different social classes perceived the political system differently and whether class gaps in perceptions of political voice vary across countries and over time.

In our analysis of ISSP data, internal efficacy is measured as the average response to two questions (both answered on an ordinal five-point scale, with higher values indicating a stronger sense of efficacy): (1) whether the respondent considers her/himself to have a good understanding of the important political issues facing the country and (2) whether the respondent thinks that most people are better informed in politics and government than s/he is.

The one question in the Political Actions Survey of 1974 that pertains to internal efficacy asks respect whether they agree (on a four-point Likert scale) with the statement that 'sometimes politics and government seem so complicated that a person like me cannot really understand what is going on.' To enhance comparability, answers to all three questions have been standardized.

Our models also include a dummy variable for 'electoral winner.' This variable takes the value of 1 for all respondents who identify with and/or voted for a party in government at the time when they answered the survey. Following Anderson and Guillory (1997), we hypothesize that citizens who support parties that are in the government are more likely to perceive of themselves as having some influence over what the government does than citizens who identify with and/or voted for opposition parties (see also Singh *et al.* 2012). Controlling for this effect would seem to be especially important when we explore over-time changes in class differences in perceptions of being politically represented. There were more Left governments in 1974 than in, say, 2014 and working-class citizens might have perceived themselves as more influential in 1974 for this reason alone.

The models that we estimate with pooled ISSP data for the period 1996-2016 include country and survey-year fixed effects. For individual countries, we replicate these models with survey-year fixed effects. Exploring changes in class gaps from 1996 to 2016 (19 countries) and then from 1974 to 2016 (7 countries), we estimate models that interact the class variables with year dummies and include country fixed effects. Finally, and most tentatively, we estimate a three-way interaction model with data for six countries to explore changes in the interaction

\_

weights) when they are available.

<sup>&</sup>lt;sup>18</sup> Our coding is based on party identification in 1996, 2004 and 2006 and on vote choice in 1974, 2014 and 2016. Döring and Manow (2019) provide the basis for our identification of parties in government. <sup>19</sup> Note also that our analyses include a weighting factor to correct for over-sampling of former Eastern Germany in ISSP surveys. For the other countries, we use national weights (design or post-stratification

of social class and union membership since the mid-1970s (again with country fixed effects included).

#### Pooled results 1996-2016

Pooling data from the five ISSP surveys, Table 1 presents the distribution of responses to the question about not having any say in what government does for each of the five large classes. Setting small businessmen aside, we observe a very clear class hierarchy in responses to this question. While 57.0% of routine workers agree that people like themselves have no say, the corresponding figure for upper-middle-class respondents is 33.4%. Between these extremes, 52.3% of skilled workers and 41.4% of (lower) middle-class respondents agree with the statement. With 49.0% agreeing with the statement, members of the small business class are situated closer to the skilled working class than the middle class in this hierarchy.

#### [Table 1]

Showing the average marginal effects that we obtain when we estimate a logistic regression model (M1) with social class, age, gender, union membership, electoral winner/loser status and internal efficacy as predictors of agreeing that 'people like me do not have any say,' the results presented in Figure 1 confirm the class hierarchy observed in Table 1 and demonstrate that the effects of belonging to any one of the five large classes are statistically significant. In addition, we find that women are marginally less likely to agree with the no-influence statement than men and that union members are marginally less likely to agree than other respondents, but the union effect fails to clear the 95% threshold for statistical

significance.<sup>20</sup> While age appears to have no effect whatsoever, respondents who voted for government parties are much less likely to agree than other respondents and people with a high self-assessed capacity to participate in politics are also less likely to agree.

# [Figure 1]

To explore the effects of different dimensions of social class on perceptions of political voice, we estimate three additional regression models: in addition to social class proxied by occupational categories and the control variables, we first include relative income household income in Model 2 and then replace income by education in Model 3. Finally, we include both income and education in Model 4. Figure 2 reports the average marginal effects of occupationbased class categories, income quintiles and education attainment categories that we obtain when we estimate each of these models (alongside average marginal effects of class in Model 1). Starting with the effects of relative income, respondents in the second quintile are just as likely to agree with the no-influence statement as respondents in the first quintile, but respondents in the top three quintiles are significantly less likely to agree than respondents in the first quintile. In substantive terms, the sense of not being politically represented clearly falls as one moves up the income ladder. The same holds, in spades, for educational attainment: respondents who have a tertiary degree are much less likely to perceive themselves as lacking political voice than respondents who have completed upper secondary education and the latter are much less likely to perceive themselves as lacking political voice than respondents who have only completed lower secondary education.

## [Figure 2]

The introduction of relative income does not in any way alter our findings about the effects of social class measured by occupational categories. The effects of income are smaller

<sup>&</sup>lt;sup>20</sup> Estimating models that interact social class and union membership, we do not find any evidence that the effects of union membership differ across classes (results available upon request).

than the effects of occupational class in the sense that the average marginal effect of being in the upper middle class rather than the routine working class is more than twice as large as the average marginal effect of being in the fifth income quintile rather than the first quintile (-.164 as compared to -.074). When we include educational attainment in the model, the effect of occupational class diminishes noticeably. Relative to the baseline, the effect of having completed tertiary education (-.151) is marginally bigger than the effect of being in an upper-middle-class occupational category (-.126), but the main take-away is surely that educational attainment and occupational class are both strong predictors of perceptions of political voice. Controlling for education as well as income, upper-middle-class professionals are 11 percentage points less likely to agree with the no-influence statement than routine workers, suggesting that work autonomy, power relations in the workplace and professional networks shape people's opinions about their political influence.

Examining the country-specific versions of the third panel of Figure 2 presented in the Appendix (Figure A.1) reinforces the important role of class and education. To summarize, we observe a clear class hierarchy in perceptions of being represented in 12 out 19 countries. There is also a clear educational hierarchy in 12 out 19 countries (in 7 out 19 countries both class and education matter). By contrast, differences between income groups are quite muddled and respondents in the top quintile are significantly more likely to perceive themselves as having political influence than respondents in bottom quintile in only 3 out 19 countries.

Again pooling ISSP data for all 19 countries, Figure 3 shows the results that we obtain when we introduce a further distinction between production and non-production workers (thus identifying seven classes). We do so because more or skilled production workers have historically been the core of organized labour and arguably occupied a privileged position in the post-war politics of class compromise (relative to other workers). We find that routine production and routine non-production workers are equally prone to think that they have no say

about what government does and that the perceptions of skilled production workers are indistinguishable from those of routine workers. In other words, it is skilled clerical and service workers alone that occupy an intermediate position between routine workers and the middle classes. In light of these findings, the analysis of temporal change that follows will maintain the distinction between skilled production and non-production workers, but not the distinction between routine production and non-production workers.

# [Figure 3]

# Temporal changes in class gaps and union effects

We now turn to the question of whether—or how—class differences in perceptions of having political influence have changed over time and the related question of the role of union power in shaping such perceptions. For this purpose, we use social class proxied by occupational categories as a synthetic variable encompassing the four of the dimensions of social class that have identified.<sup>21</sup> To begin with, Figure 4 reports predicted probabilities of routine workers, skilled workers, middle-class respondents and upper middle-class respondents agreeing with the no-influence statement in 1996, 2004/6 and 2014/6. Based on ISSP data, we obtain these results by interacting time dummies with our class variables. For presentational purposes, we focus here on the 'underrepresented working classes' and the middle classes, but the model om which Figure 4 is based also includes skilled non-production workers and members of the small business class.

# [Figure 4]

-

<sup>&</sup>lt;sup>21</sup> This simplification is partly motivated by fact that we cannot assign respondents in the Political Action Survey of 1974 to income quintiles in the manner described above.

Generalizing across our 19 ISSP countries, it is not the case that workers have come to perceive themselves as less politically influential since the mid-1990s. In fact, we observe a statistically significant drop in agreement with the no-influence statement among unskilled workers and skilled production workers from the mid-1990s to the mid-2000s and no change from the mid-2000s to the mid-2010s. The same pattern holds for members of the lower and upper middle classes.<sup>22</sup> At the same time, Figure 4 shows that class gaps in perceptions of political voice are large and persistent.

Figure 5 shows the predicted probabilities that we obtain when we replicate this exercise for the seven countries for which we have survey data for 1974, 2004/6 and 2014/6.<sup>23</sup> We now see some overall increase in the propensity of all classes to agree with the statement that 'people like me do not have any say' between the mid-1970s and the mid-2000s, followed by a combination of stability and decline between the mid-2000s and the mid-2010s. The propensity of skilled production workers (and to a smaller extent routine workers) to perceive themselves as not having any political influence increased more strongly from the mid-1970s to the mid-2000ss than the propensity of middle classes to perceive themselves in this manner. In the subsequent decade, the perceptions of the working classes remained then relatively stable while the middle classes perceived an improvement in their political representations. As shown in Table 2, increases in the gaps between workers and the middle classes from 1974 to 2014/6 clear the 95% threshold for statistical significance and so does the increase in the gap between skilled production workers and the upper middle class from 1974 to the mid-2010s.

[Figure 5 and Table 2]

The overall results are very similar if we drop respondents who chose the middle response category (see Figure A.2 in the online appendix) and if we control for income and educational attainment (see Figure A.3).

The model on which these results are based does not union membership because this variable is missing from the Austrian survey.

Figure 6 shows country-specific estimates of perceived non-representation by social class over the period 1974-2016. Overall trends in agreement with the no-influence statement vary quite a lot across countries, but the persistence of class gaps is clearly something that the seven countries have in common. While American workers came to perceive themselves as less well represented, Swiss workers came to perceive themselves as better represented over this period. In both cases, shifts in perceptions of political voice among middle-class citizens followed the same trajectory as those working-class citizens. Austria, Finland and the Netherlands stand out as the three cases in which the gap between working-class and middle-class respondents increased over the time period covered by our data. It is perhaps not a coincidence that of the seven cases included in this analysis, Austria, Finland and the Netherlands are also the three cases that most closely exemplified 'social democratic corporatism' in the 1970s.

# [Figure 6]

Turning, finally, to the changing role of union membership, Figure 7 reports on the results that we obtain when we interact union membership, social class and time dummies with pooled data for the six countries with 1974 surveys that include the union membership question. Consistent with our expectations, we find that the effects of union membership on workers' perceptions of being represented in politics changed significantly from the mid-1970s to the mid-2000s. In the mid-1970s, working-class union members were much less likely to perceive themselves as lacking political influence than their non-union counterparts. For skilled production workers and routine workers alike, we no longer observe any significant difference between union members and other respondents by the mid-2000s. In 2004/06, unionized routine workers were even more likely to feel non-represented than non-unionized respondents. Simply put, working-class union members caught up with the lack of political influence perceived by their non-union counterparts over the period from 1974 to 2004. Strikingly, we do not observe

such a change for lower-middle-class respondents. Unionized lower-middle-class respondents did not perceived themselves as more influential than other lower-middle-class respondents in the mid-1970s and their perceptions of political voice moved in tandem with the others from the mid-1970s to the mid-2010s.<sup>24</sup>

[Figure 7]

#### Conclusion

[From previous draft: to be rewritten]

With German panel data and 2014-16 data from the European Social Survey, Hense and Schäfer (2020) demonstrate that working-class citizens and low-income citizens are particularly prone to support right-wing populist parties. The authors show that working-class and low-income citizens are also more likely to perceive government as unresponsive and that such perceptions largely account for the association between social class and voting for right-wing populist parties. Inspired by an earlier version of Hense and Schäfer's paper as well as Lindh and McCall (2020), we started the research for this paper thinking that government responsiveness had become more unequal since the early 1980s and that 'experienced marginalization' explained the turn to right-wing populism among segments of the working-class over the last two decades.

The results presented above do not contradict any of the results presented by Hense and Schäfer (2020), but they do raise questions about the larger story that we thought we were going to tell. To the extent that people's perceptions of their political influence tell us something meaningful about the objective representation of different citizens, our results suggest that

<sup>24</sup> Results for skilled non-production workers and upper middle-class respondents are presented in Figure A.4.

\_

<sup>&</sup>lt;sup>25</sup> On working-class support for right-wing populist parties, see also Oesch and Rennwald (2018)

nothing much has changed over the last 30 years, even the last 50 years. For the subset of countries for which we have data going back to the 1970s, most working-class citizens perceived themselves as having little or no political influence in the 1970s and we only observe an increase in the percentage of working-class citizens expressing this view in five out of seven countries. From 1996 to 2016, the percentage of working-class citizens perceiving themselves as not having any political influence declined slightly, as did the percentage of other citizens expressing this view. We do observe a statistically significant increase in class differences in perceived influence from the mid-1970s to the mid-1990s, but, again, the persistence of class differences is the main take-away of our analysis.

Another noteworthy feature of our empirical results is that the rise of neoliberal policy paradigms and the associated decline of unions appear to have had no effect on perceptions of political representation among workers who are not themselves union members. Unionized workers perceive themselves as less politically influential than they did in the 1970s, but this is not the case for unorganized workers. The implication would seem to be that unorganized workers typically do not perceive of unions as their representatives in politics.

It is perfectly possible that government responsiveness has become more unequal by some objective measure(s) and that citizens have failed to register this development in their perceptions of political representation. In this case, however, growing class bias in responsiveness can hardly be invoked to explain growing working-class support for populist parties. Other grievances—employment insecurity, income stagnation and rising income inequality as well as 'cultural grievances'—would appear to be more directly relevant for changes in working-class political behaviour over the last two decades. That said, it may be that *unequal responsiveness has become more salient to working-class citizens* as a result of changing social and economic conditions. Arguably, workers perceived themselves as politically marginal already in the 1970s (or 1990s), but this did not bother them as much as it

does today. An implication worthy of further research is that perceptions of not being well represented in politics have become more closely associated with non-voting and voting for 'anti-system parties.'

Another topic that we want to explore further concerns the heterogeneity of experienced political marginalization within the working class(es). It goes without saying that class is not the only social identity through which individuals experience politics and perceive their own political voice (or lack thereof). If we were to distinguish between immigrant and native workers (or, in the case of the US, between white and black workers), and between male and female workers, we might well observe off-setting trends in perceptions of being politically represented. For the time being, suffice it to say that the empirical findings presented in this paper call into question the idea that social class is no longer a politically relevant category.

#### REFERENCES

- Anderson, Christopher, and Christine Guillory (1997). 'Political Institutions and Satisfaction with Democracy: A Cross-National Analysis of Consensus and Majoritarian Systems', *American Political Science Review*, 91:1, 66–81.
- Alexiadou, Despina (2016). *Ideologues, Partisans, and Loyalists: Ministers and Policymaking* in Parliamentary Cabinets. Oxford University Press.
- Ares, Macarena (2020). 'Changing Classes, Changing Preferences: How Social Class Mobility Affects Economic Preferences', *West European Politics*, 43:6, 1211–37.
- Armingeon, Klaus, and Lisa Schädel (2015). 'Social Inequality in Political Participation: The Dark Side of Individualisation', *West European Politics*, 38:1, 1–27.
- Arzheimer, Kai (2008). 'Political Efficacy', In *Encyclopedia of Political Communication*, edited by Lynda Kaid and Christina Holtz-Bacha (Thousand Oaks: SAGE), 579–580.
- Baccaro, Lucio, and Chris Howell (2017). *Trajectories of Neo-Liberal Transformation:*European Industrial Relations since the 1970s. New York: Cambridge University Press.
- Balch, George (1974). 'Multiple Indicators in Survey Research: The Concept of 'Sense of Political Efficacy', *Political Methodology* 1, 1–43.
- Best, Heinrich (2007). 'New Challenges, New Elites? Changes in the Recruitment and Career Patterns of European Representative Elites', *Comparative Sociology*, 6:1, 85–113.
- Blyth, Mark (2002). *Great Transformations: Economic Ideas and Institutional Change in the Twentieth Century*. New York: Cambridge University Press.
- Bovens, Mark, and Anchrit Wille (2017). *Diploma Democracy: The Rise of Political Meritocracy*. Oxford: Oxford University Press.

- Carnes, Nicholas (2013). White-collar Government: The Hidden Role of Class in Economic Policy Making. Chicago: University of Chicago Press.
- Carnes, Nicholas and Noam Lupu. (2015). 'Rethinking the Comparative Perspective on Class and Representation: Evidence from Latin America', *American Journal of Political Science* 59(1): 1–18.
- Carnes, Nicholas and Noam Lupu (2021). 'Working-Class Office Holding in the OECD."

  Unpublished paper.
- Döring, Holger, and Philip Manow (2019). Parliaments and Governments Database (ParlGov), Development version, <a href="http://www.parlgov.org/">http://www.parlgov.org/</a>.
- Elsässer, Lea (2018). Wessen Stimme zählt? Soziale und politische Ungleichheit in Deutschland. Frankfurt: Campus Verlag.
- Elsässer, Lea, Svenje Hense, and Armin Schäfer (2020). 'Not Just Money: Unequal Responsiveness in Egalitarian Democracies', *Journal of European Public Policy* (online first).
- Erikson, Robert, and John Goldthorpe (1992). *The Constant Flux: A Study of Class Mobility in Industrial Societies*. Oxford: Clarendon Press.
- Esaiasson, Peter; Ann-Kristin Kölln, and Sedef Turper (2015). 'External Efficacy and Perceived Responsiveness: Similar but Distinct Concepts', *International Journal of Public Opinion Research*, 27:3, 432–445.
- Giger, Nathalie; Jan Rosset, and Julian Bernauer (2012). 'The Poor Political Representation of the Poor in a Comparative Perspective', *Representation*, 48:1, 47–61.
- Gilens, Martin (2012). Affluence & Influence: Economic Inequality and Political Power in America Princeton. Princeton: Princeton University Press.

- Hall, Peter (1983). 'Policy Paradigms, Social Learning and the State: The Case of Economic Policy Making in Britain', *Comparative Politics*, 25:3, 275–296.
- Häusermann, Silja, and Hanspeter Kriesi (2015). 'What Do Voters Want? Dimensions and configurations in Individual-Level Preferences and Party Choice', in Pablo Beramendi, Silja Häusermann, Herbert Kitschelt, and Hanspeter Kriesi (eds.), *The Politics of Advanced Capitalism*, edited. Cambridge: Cambridge University Press, 202–230.
- Hense, Svenja, and Armin Schäfer (2020). 'Unequal Representation and the Right-Wing Populist Vote in Europe', Paper presented at the workshop 'The state and future of representative democracy—a comparative perspective'. Villa Vigoni, Italy, February 18, 2020.
- Kitschelt, Herbert, and Philipp Rehm (2014). 'Occupations as a Site of Political Preference Formation', *Comparative Political Studies*, 47:12, 1670–706.
- Lindh, Arvid, and Leslie McCall (2020). 'Class Position and Political Opinion in Rich Democracies', *Annual Review of Sociology* 46: 419-441.
- Lupu, Noam, and Zach Warner (2020). 'Why are the Affluent Better Represented Around the World?', forthcoming in *European Journal of Political Research*.
- Mathisen, Ruben; Wouter Schakel, Svenja Hense, Lea Elsässer, Mikael Persson and Jonas Pontusson (2021). "Unequal Responsiveness and Government Partisanship in Northwest Europe', *Unequal Democracies Working paper no. 28* (University of Geneva).
- Menold, Natalja, and Kathrin Bogner (2016). *Design of Rating Scales in Questionnaires. GESIS Survey Guidelines.* Mannheim: GESIS Leibniz Institute for the Social Sciences.
- Mosimann, Nadja, and Jonas Pontusson (2017). 'Solidaristic Unionism and Support for Redistribution in Contemporary Europe', *World Politics*, 69:3, 448–492.

- Mosimann, Nadja and Jonas Pontusson (2020). 'Heterogeneity of the Trade Union Membership Effect on Support for Redistribution in Western Europe', *Unequal Democracies Working paper no. 12* (University of Geneva).
- Norris, Mikel (2015). 'The Economic Roots of External Efficacy: Assessing the Relationship between External Political Efficacy and Income Inequality', *Canadian Journal of Political Science*, 48:4, 791–813.
- Oesch, Daniel (2021). 'Contemporary Class Analysis', in M. Gangl, L. Platt, J. Polavieja, H. van de Werfhorst (eds.), *Handbook of Social Stratification*. Oxford: Oxford University Press, forthcoming.
- Oesch, Daniel (2006). Redrawing the Class Map: Stratification and Institutions in Britain, Germany, Sweden and Switzerland. London: Palgrave Macmillan.
- Oesch, Daniel, and Line Rennwald (2018). 'Electoral Competition in Europe's New Tripolar Political Space: Class Voting for the Left, Centre-Right and Radical Right', *European Journal of Political Research*, 57:4, 783–807.
- Persson, Mikael (2020). 'What Explains Unequal Representation? Investigating the Role of Agenda Setting, Costly Policies and Status Quo Bias', *Unequal Democracies Working Paper no. 18*, University of Geneva.
- Pilotti, Andrea; Baptiste Antoniazza, Roberto Di Capua and Karim Lasseb (2021). 'From Class Representativeness to Class Gap: The Social Transformation of the Left Political Elites in Switzerland." Unpublished paper, University of Lausanne.
- Pontusson, Jonas (2013). 'Unionization, Inequality and Redistribution', *British Journal of Industrial Relations*, 51:4, 797–825.

- Rennwald, Line (2020). Social Democratic Parties and the Working Class: New Voting Patterns. Cham: Palgrave Macmillan.
- Rohrschneider, Robert (2005). 'Institutional Quality and Perceptions of Representation in Advanced Industrial Democracies', *Comparative Political Studies*, 38:7, 850–874.
- Rosset, Jan, Nathalie Giger, and Julian Bernauer (2013). 'More Money, Fewer Problems? Cross-Level Effects of Economic Deprivation on Political Representation', *West European Politics*, 36:4, 817–835.
- Rosset, Jan, and Christian Stecker (2019). 'How Well Are Citizens Represented by their Governments? Issue Congruence and Inequality in Europe', *European Political Science Review*, 11:2, 145–160.
- Savage, Mike. 2015. Social Class in the 21st Century. London: Penguin Random House.
- Schakel, Wouter (2019). 'Unequal Policy Responsiveness in the Netherlands', *Socio-Economic Review* (online first).
- Schakel, Wouter and Daphne van der Pas (2020). 'Degrees of Influence: Educational Inequality in Policy Representation', *European Journal of Political Research*, online first.
- Scharpf, Fritz (1991). *Crisis and Choice in European Social Democracy*. Ithaca, NY: Cornell University Press.
- Schlozman, Kay, Sidney Verba, and Henry Brady (2012). *The Unheavenly Chorus: Unequal Political Voice and the Broken Promise of American Democracy*. Princeton: Princeton University Press.
- Singh, Shane, Ekrem Karakoç, and André Blais (2012). 'Differentiating Winners: How Elections Affect Satisfaction with Democracy', *Electoral Studies*, 31, 201–211.

Whitefield, Stephen (2006). 'Mind the Representation Gap: Explaining Differences in Public Views of Representation in Postcommunist Democracies', *Comparative Political Studies*, 39:6, 733–758.

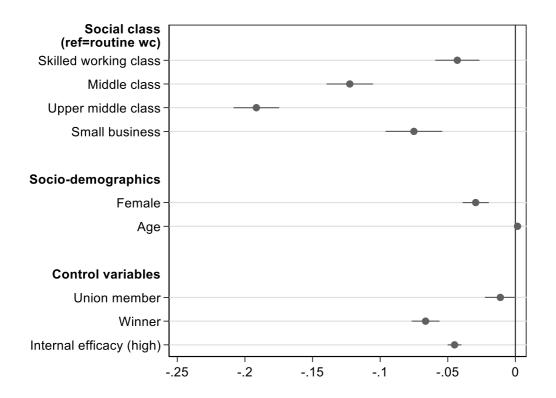
Wright, Erik Olin. 1998. Classes (2nd edition). London: Verso.

# **TABLES AND FIGURES**

Table 1: Distribution of survey responses by social class (1996-2016)

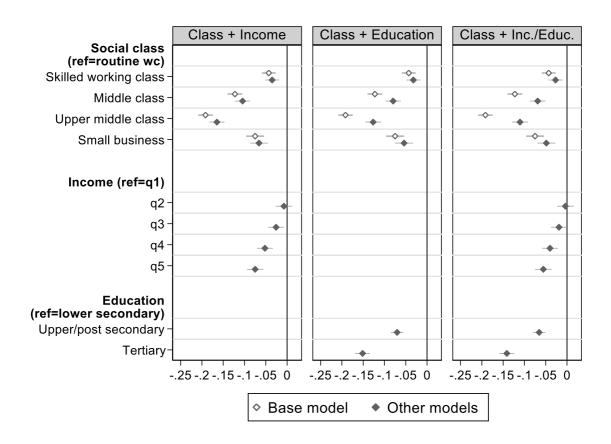
	strongly				strongly	
	agree	agree	neither	disagree	disagree	N
routine working class	24.6	32.4	15.7	17.5	9.7	6,343
skilled working class	20.4	31.9	17.5	21.7	8.4	14,486
middle class	14.3	27.1	18.2	30.1	10.3	10,184
upper middle class	10.9	23.5	17.9	35.1	12.6	11,482
small business	19.5	29.5	16.8	24.4	9.7	4,563

Figure 1: Average marginal effects of class other determinants on agreeing with the no-influence statement, 5-class schema



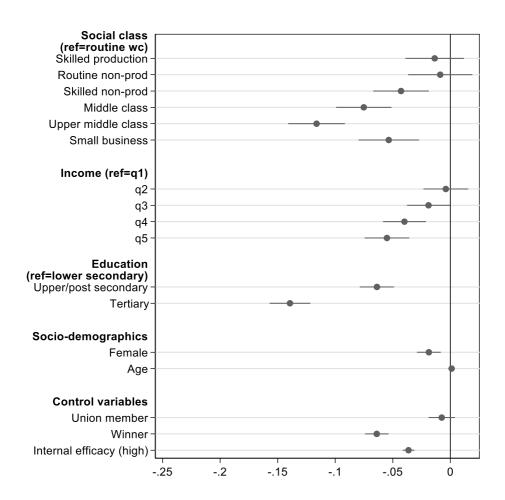
See Table A.2 (Model 1) for full regression results.

Figure 2: Average marginal effects of class, income and education on agreeing with the noinfluence statement, 5-class schema



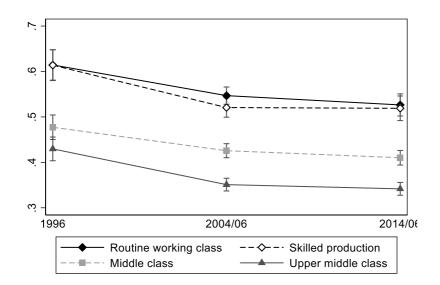
Note: See Table A.2 for full regression results (Models 1-4).

Figure 3: Average marginal effects, 7-class schema



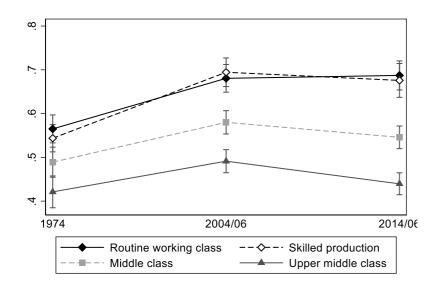
Note: See Table A.2 for full regression results (Model 5).

Figure 4: Predicted probabilities of agreeing with the no-influence statement by class and time (6-class schema), 1996-2016



Note: See Table A.3 for full regression results (Model 6). Results for skilled non-production workers and small business owners not shown.

Figure 5: Predicted probabilities of agreeing with the no-influence statement by class and time (6-class schema), 1974-2016



Note: See Table A.3 for full regression results (Model 7). Results for skilled non-production workers and small business owners not shown.

Table 2: Class differences and changes in class differences (in predicted probabilities), with p-values in parentheses, 1974-2016

	1974	2004/6	2014/6	change 1974=>2004/6	change 1974=>2014/6
routine WC minus MC	.076	.100	.141	.025	.065
	(.001)	(.000)	(.000)	(.436)	(.039)
routine WC minus upper MC	.144	.189	.248	.045	.104
	(.000)	(.000)	(.000)	(.155)	(.001)
skilled production WC minus MC	.055	.114	.130	.060	.075
	(.019)	(.000)	(.000)	(.057)	(.022)
skilled production WC minus upper MC	.123	.203	.236	.081	.114
	(000)	(.000)	(.000)	(.011)	(.001)

Note: P-values based on t-test of equality hypotheses for differences, bold font = p < .05.

Figure 6: Predicted probabilities of agreeing with the no-influence statement by class and time (6-class schema), separate estimates for each country

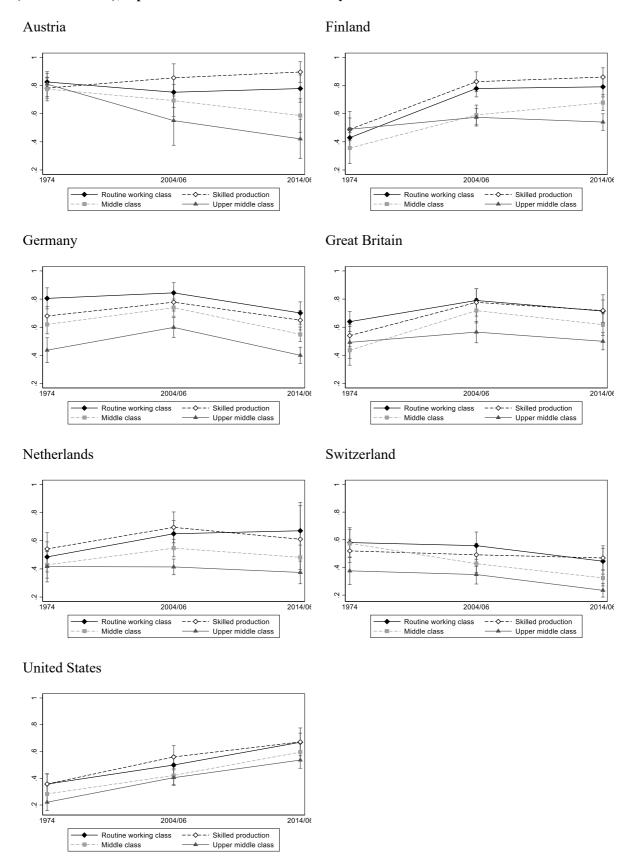
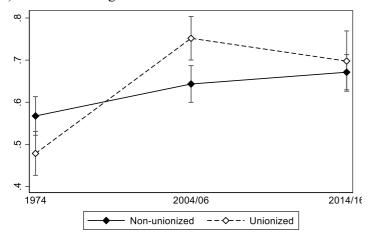
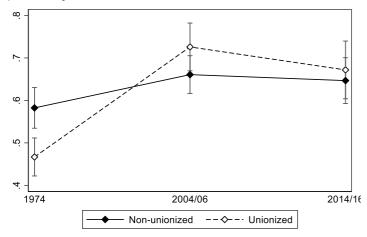


Figure 7: Time-varying effects of union membership by social class (6-class model), predicted probabilities of agreeing with the no-influence statement, 1974-2016

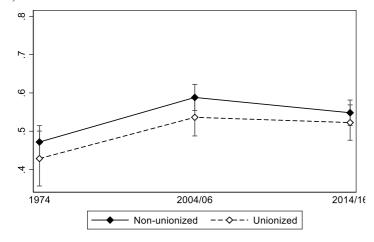
# a) Routine working class



### b) Skilled production workers



## c) Lower middle class



Note: See Table A.3 for full regression results (Model 8).

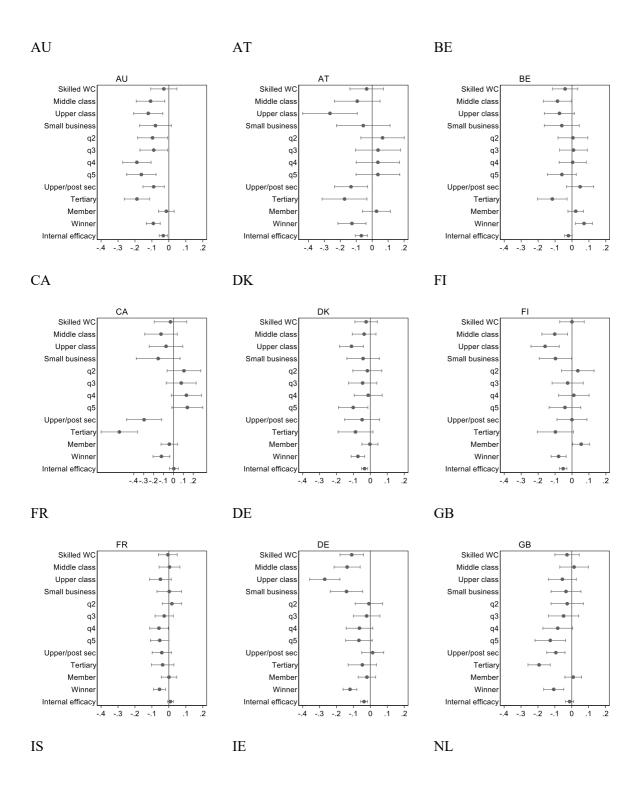
## **ONLINE APPENDIX**

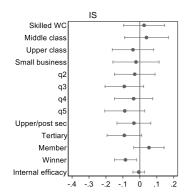
Table A.1: Survey-based estimates distribution of respondents in paid work across six social classes (with country weights)

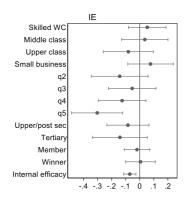
	1974	1996	2016
routine working class	19.2	12.9	11.9
skilled production workers	19.8	14.2	8.9
skilled non-production workers	21.0	20.7	19.8
middle class	14.1	19.6	22.5
upper middle class	11.7	22.2	26.1
small business	14.2	10.4	10.8

Note: The estimates for 1974 are based on 7 countries while the estimates for 1996 and 2016 are based on 12 and 14 countries respectively.

Figure A.1: Average marginal effects by country, 1996-2016







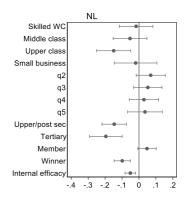
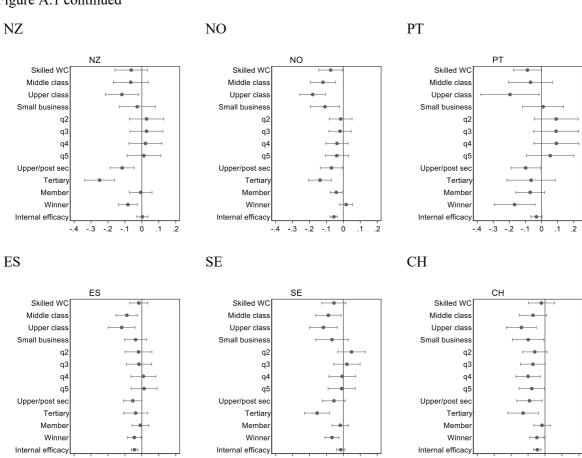


Figure A.1 continued



US

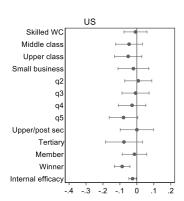


Table A.2: Effects of social class and other determinants on agreeing with the no-influence statement, logistic regression models with ISSP data (1996-2016)

	M1 Class	M2 Class + Income	M3 Class + Education	M4 Class + Inc./Educ.	M5 Class (7-class schema)
Class (Ref=Routine working cla	uss)				
Routine production	-	-	-	-	Ref
Routine non-production	-	-	-	-	-0.060
Skilled working class	-0.187***	-0.153***	-0.141***	-0.118**	(0.06)
Skilled production	(0.04)	(0.04)	(0.04)	(0.04)	-0.039
Skilled non-production	-	-	-	-	(0.06) -0.188***
Middle class	-0.532***	-0.456***	-0.350***	-0.303***	(0.05) -0.331***
Upper middle class	(0.04) -0.843***	(0.04) -0.726***	(0.04) -0.561***	(0.04) -0.490***	(0.05) -0.516***
Small business	(0.04) -0.326*** (0.05)	(0.04) -0.287***	(0.04) -0.237*** (0.05)	(0.04) -0.214*** (0.05)	(0.06) -0.235***
Income (Ref=Q1)	(0.03)	(0.05)	(0.03)	(0.03)	(0.06)
Quintile 2		-0.033		-0.017	-0.018
Quintile 3		(0.04) -0.114**		(0.04) -0.084*	(0.04) -0.085*
Quintile 4		(0.04) -0.231***		(0.04) -0.178***	(0.04) -0.179***
Quintile 5		(0.04) -0.334***		(0.04) -0.249***	(0.04) -0.247***
Education (Ref=lower secondar	v)	(0.04)		(0.04)	(0.04)
Upper/post-secondary	<i>3)</i>		-0.307*** (0.03)	-0.286*** (0.03)	-0.279*** (0.03)
Tertiary			-0.667*** (0.04)	-0.624*** (0.04)	-0.615*** (0.04)
Female	-0.131*** (0.02)	-0.138*** (0.02)	-0.102*** (0.02)	-0.109*** (0.02)	-0.084*** (0.02)
Age	0.007*** (0.00)	0.002) 0.008*** (0.00)	0.004*** (0.00)	0.005*** (0.00)	0.005*** (0.00)
Union member	-0.050 <sup>+</sup> (0.03)	-0.042 (0.03)	-0.035 (0.03)	-0.030 (0.03)	-0.034 (0.03)
Winner status	-0.296*** (0.02)	-0.288*** (0.02)	-0.296*** (0.02)	-0.289*** (0.02)	-0.288*** (0.02)
Internal efficacy (high)	-0.201***	-0.188***	-0.174***	-0.166***	-0.164***
Survey year dummies	(0.01) Yes	(0.01) Yes	(0.01) Yes	(0.01) Yes	(0.01) Yes
Country dummies	Yes	Yes	Yes	Yes	Yes
Constant	0.623***	0.707***	0.893***	0.936***	0.944***
N	(0.07) 44970	(0.08) 44970	(0.08) 44970	(0.08) 44970	(0.09) 44970

Pseudo R2	.0742	.0761	.0800	.0811	.0813
AIC	58041.3	57924.6	57679.4	57615.9	57609.0
BIC	58320.2	58238.3	57975.7	57947.1	57957.6

Note: Standard errors in parentheses; p < 0.10, p < 0.05, p < 0.01, p < 0.01, p < 0.001

Table A.3: Time-varying effects of social class and other determinants on agreeing with the no-influence statement, logistic regression models with ISSP data and PAC data

	M6 1996-2016,	M7 1974-2016,	M8 1974-2016,
	19 countries	7 countries	6 countries
Class (Ref=Routine workers)			
Skilled production workers	-0.003	-0.094	0.067
	(0.11)	(0.10)	(0.15)
Skilled non-production	-0.240*	$-0.171^{+}$	$-0.239^{+}$
	(0.10)	(0.09)	(0.13)
Middle class	-0.600***	-0.334**	-0.418**
	(0.10)	(0.10)	(0.14)
Upper middle class	-0.805***	-0.634***	-0.831***
	(0.10)	(0.11)	(0.15)
Small business owners	-0.278*	0.064	-0.034
	(0.12)	(0.11)	(0.14)
Female	-0.101***	-0.072*	-0.097*
	(0.02)	(0.04)	(0.04)
Age	0.007***	$0.006^{***}$	$0.006^{***}$
	(0.00)	(0.00)	(0.00)
Union member	-0.064*	-	-0.389*
	(0.03)		(0.15)
Winner status	-0.304***	-0.395***	-0.421***
	(0.02)	(0.04)	(0.04)
Internal efficacy (high)	-0.203***	-0.400***	-0.407***
	(0.01)	(0.02)	(0.02)
	Ref=1996	Ref=1974	Ref=1974
2004/06	-0.300***	0.538***	$0.345^{*}$
	(0.09)	(0.11)	(0.15)
2014/16	-0.388***	0.572***	$0.480^{**}$
	(0.09)	(0.11)	(0.15)
2004/06#Skilled production	-0.111	0.164	0.016
	(0.13)	(0.15)	(0.21)
2004/06#Skilled non-production	0.002	-0.016	0.194
	(0.11)	(0.14)	(0.18)
2004/06#Middle class	0.077	-0.137	0.165
	(0.11)	(0.14)	(0.19)
2004/06#Upper class	-0.052	-0.229	0.157
	(0.11)	(0.15)	(0.19)
2004/06#Small business	0.031	-0.338*	-0.059
	(0.13)	(0.16)	(0.20)
2014/16#Skilled production	-0.029	0.037	-0.185
	(0.13)	(0.16)	(0.22)
2014/16#Skilled non-production	-0.026	-0.165	-0.129
	(0.12)	(0.14)	(0.19)
2014/16#Middle class	0.098	-0.323*	-0.146
	(0.12)	(0.15)	(0.19)
2014/16#Upper class	-0.007	-0.489**	-0.250
	(0.11)	(0.15)	(0.19)
2014/16#Small business	-0.149	-0.652***	-0.509**
	(0.14)	(0.16)	(0.20)

2004/06#Union member			0.947***
			(0.24)
2014/16#Union member			0.521*
			(0.26)
Member#Skilled production			-0.117
			(0.21)
Member#Skilled non-production			0.311
N. 1 (N.C.11) 1			(0.21)
Member#Middle class			0.199
Member#Upper class			$(0.24) \ 0.509^{+}$
Wember#Opper class			(0.26)
Member#Small business			0.064
Wember#Sman business			(0.35)
2004/06#Member#Skilled prod			-0.110
200 WoomMemberworkinea proa			(0.34)
2004/06#Member#Skilled non-prod			-0.814*
1			(0.32)
2004/06#Member#Middle class			-0.986**
			(0.33)
2004/06#Member#Upper class			-1.137***
			(0.34)
2004/06#Member#Small business			$-0.959^{+}$
			(0.49)
2014/16#Member#Skilled prod			0.106
			(0.37)
2014/16#Member#Skilled non-prod			-0.073
2014/17/04 1 /04/11 1			(0.34)
2014/16#Member#Middle class			-0.443
2014/16#Morehor#Llenger alogg			(0.34) -0.720*
2014/16#Member#Upper class			(0.36)
2014/16#Member#Small business			-0.397
2014/10#Memocr#Sman dusiness			(0.48)
			(0.10)
Country dummies	Yes	Yes	Yes
Constant	0.587***	$0.899^{***}$	$0.476^{***}$
	(0.10)	(0.11)	(0.13)
N	44970	19098	16888
Pseudo R2	.0705	.0873	.0844
AIC	58288.4	24150.7	21592.9
BIC	58645.7	24370.7	21941.0

Note: Standard errors in parentheses;  $^{+}p < 0.10, ^{*}p < 0.05, ^{**}p < 0.01, ^{***}p < 0.001$ 

Figure A.2: Predicted probabilities of agreeing with the no-influence statement by class and time (6-class schema), 1996-2016, without the middle response category

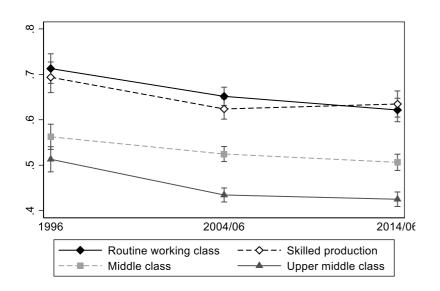


Figure A.3: Predicted probabilities of agreeing with the no-influence statement by class and time (6-class schema), 1996-2016, with inclusion of income and education

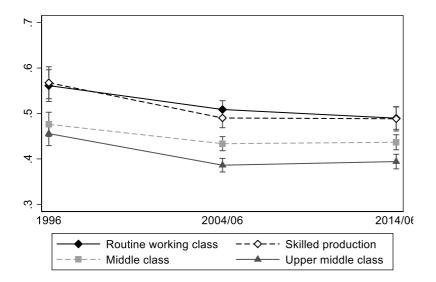
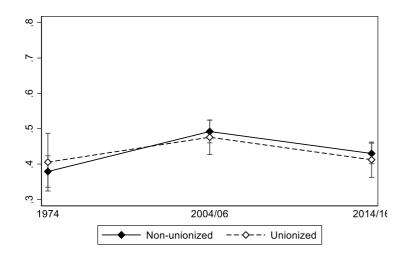
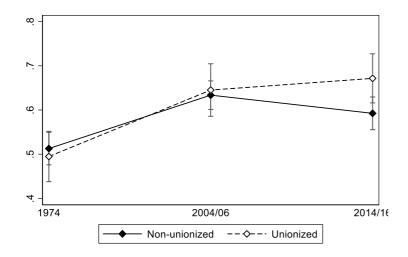


Figure A.4: Time-varying effect of union membership by social class (6 countries), 1974-2016, other classes

# Upper middle class



## Skilled non-production workers



Note: See Table A.3 for full regression results (Model 8).