



# A new working class? A cross-national and a longitudinal approach to class voting in post-industrial societies

Macarena Ares

Thesis submitted for assessment with a view to  
obtaining the degree of Doctor of Political and Social Sciences  
of the European University Institute

Florence, November 2017



European University Institute  
**Department of Political and Social Sciences**

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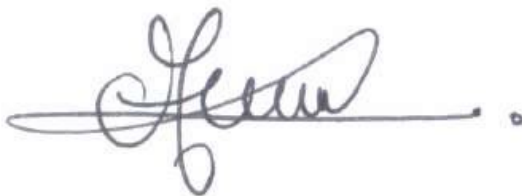
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## Abstract

Post-industrial transformations in the occupational structure and new patterns of class-party alignments have fueled the debate on the relevance of social class as a determinant of political preferences and behavior. Although the growth of the service sector is one of the distinctive traits of post-industrial economies, low-skilled service workers have received limited attention in recent research on class politics. This dissertation analyzes the political implications of class in post-industrial societies, focusing specifically on the comparison between low-skilled production and service workers. Through a two-step analysis of class voting, this dissertation studies, first, the association between class and issue preferences and, second, the relationship between class and electoral behavior. This approach to class voting also allows me to theorize and analyze potential moderators and mechanisms of the individual-level association between class and political outcomes. To study these different aspects of class voting both cross-sectionally and longitudinally this thesis relies on multiple datasets like the European Social Survey, the Chapel Hill Expert Survey and the British Household Panel Survey, and on different estimation methods like multi-level, conditional logistic and panel data regression models.

The results of a systematic comparison of production and service workers indicate that the two classes constitute a rather homogeneous electoral constituency both in terms of preferences on cultural and economic issues, as well as in their likelihood of voting for different party families. Thus, these two groups could constitute a new working class, characterized by its economically left-wing but culturally authoritarian political preferences, but also by its higher levels of electoral abstention. Other than revealing the similarity between production and service workers, this dissertation also contributes to the literature on class voting by studying moderators and mechanisms of the individual-level relationship between class location and political preferences. The analyses indicate that the politicization of policy issues by parties or the length of class tenure moderate this relationship. Moreover, I also consider how vertical and horizontal class mobility throughout an individuals' career relates to differences in policy preferences. For this purpose, I implement a longitudinal approach, which has been rather infrequent in studies of class voting.

The conclusion of this dissertation discusses the implications of these findings for the political representation of the working class and for aggregate levels of class voting. Overall, and in clear contrast with the dealignment thesis, this dissertation indicates that class is still a relevant determinant of political preferences in post-industrial societies.





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# Chapter 1

## Introduction and theoretical background

### Introduction

Some of the first studies that focused systematically on individual and group political behavior in the 1950s and 1960s highlighted the crucial role of social class as a determinant of political preferences and behavior (Lazarsfeld, Berelson, & Gaudet, 1968; Lipset, 1960; Lipset & Rokkan, 1967). Although in the 1980s and 1990s the role of class in politics became increasingly challenged, preliminary analyses of recent political events, like the victory of Donald Trump or the results of the Brexit referendum, have sparked a renewed debate about the role of social class as a determinant of political behavior (Carnes & Lupu, 2017; Cohn, 2016; Hobolt, 2016). Many of these recent arguments about the relevance of social class draw on earlier contributions from the 1990s and early 2000s that studied the class basis of radical right support (Betz, 1994; Kitschelt & McGann, 1995; Lubbers, Gijsberts, & Scheepers, 2002; Norris, 2005).

This dissertation draws on the insights from recent accounts of class voting, which have adapted the study of the link between social class and political attitudes and behavior to the context of post-industrial democracies. This research is characterized by having considered the heterogeneity of the occupational structure in these advanced economies, and the increasing dimensionality of the political conflict. In this dissertation I diverge from some of the studies that, in the context of the debate about the political relevance of class location, have attempted to quantify class voting or measure trends in aggregate levels of class voting across time and countries (e.g. Franklin, 1985; Knutsen, 2006; Nieuwbeerta & De Graaf, 1999; Rose & McAllister, 1986). Here, I focus in greater detail on the individual-level association between social class, issue preferences and vote, and look deeper into how these different factors relate to each other, and which factors might moderate these relationships. Moreover, I also adopt a longitudinal perspective to assess the impact of intra-generational class mobility on political preferences. Thus, the focus of this dissertation is mostly placed on the demand side of electoral politics.

This dissertation contributes to the class-voting literature in two different ways. First of all, adopting a classical approach to the study of class voting, this dissertation compares the electoral behavior and political preferences of low- and unskilled workers in the production

and service sector (and how they differ, in turn, from other classes). Extant literature has focused on industrial blue-collar workers (e.g. Houtman, Achterberg, & Derks, 2008; Rennwald, 2013), but we lack systematic evidence of how this group compares to service workers. A detailed account of these workers' behavior is especially pertinent when considering that the production working class is in numerical decline, while low-skilled service jobs have grown, and hence this group has the potential to become the 'new' post-industrial working class. Throughout this dissertation I pay special attention to these two groups of workers, and compare them to the rest of the occupational structure. An analysis of their preferences and behavior reveals striking similarities between these two groups, despite strong disparities in their demographic composition and the logic of their jobs. As I argue in the conclusion and in the different chapters in this dissertation, the analyses and results referring to these electoral constituencies not only have important implications for future political science studies, but also for party mobilization strategies and unequal representation of voters, among others.

This dissertation also contributes to the existing literature by implementing a series of innovations in the empirical assessment of the political implications of social class. These new empirical approaches further our understanding of the nuances and mechanisms of the relationship between class, political preferences and voting behavior. In these analyses, I consider potential supply-side moderators in the link between class and preferences, and I relate preferences to behavior by taking into account the distances between parties and voters. In the last two empirical chapters, I also implement a longitudinal approach, which has been rather infrequent in accounts of the political implications of class, and which also contributes to the debate on whether class effects are mainly due to selection or socialization. These longitudinal analyses also present some methodological innovations in the study of the association between class and vote that have great potential for future research. Moreover, although the focus of these analyses is on the individual level, they indicate under what conditions we might observe greater or lower levels of class voting at the aggregate level.

The geographical scope of the empirical analyses is restricted in two different ways, depending on the analyses under consideration. The first part of the dissertation, which is based on cross-sectional data from the European Social Survey (ESS) focuses exclusively on European democracies. The second part of the dissertation is based on longitudinal analyses, and for this reason the geographical scope is further reduced to consider only the United Kingdom. These chapters draw on data from the British Household Panel Survey (BHPS). With these two types of data, I study the association between class, issue preferences and electoral behavior. As I

explain in further detail in this chapter, to operationalize class location I follow Oesch's class scheme.

In what follows, I first review the literature that has analyzed the role of class in politics in post-industrial societies. I start by presenting the arguments from the dealignment thesis, which brings me to comment on the socio-economic transformations taking place in deindustrializing societies, and how these have been captured by new class schemes, such as Oesch's. I then present how these transformations have been interpreted, and related to new patterns of class-party alignments within the post-industrial partisan realignment framework. I conclude with some reflections on the implications of these different arguments for contemporary patterns of class voting, and link this to the analyses and contributions of this dissertation.

### **The death of class voting? The dealignment thesis**

The position that an individual occupies in the social structure played a central role already in early studies that attempted to systematically explain political behavior. Since Lazarsfeld et al. (1968) stated that '*a person thinks, politically, as he is, socially*' we find repeated references to where a person stands in the socio-economic structure as a key determinant of political preferences and behavior. Socio-structural factors also play a prominent role in Lipset and Rokkan's (1967) '*Party Systems and Voter Alignments*' and, more generally, in cleavage theories. Within this focus on socio-structural factors, many studies addressed the association between social class and political attitudes and behavior. However, despite its repeated appearance in the literature, the empirical connection between social class and political preferences has been a contested issue, especially since the 1980s, when different scholars announced the end of class as a relevant determinant of political behavior.

Although social class was once a central element in politics and political science, during the 1980s and 1990s claims about a steep decline in the class basis of politics became commonplace in comparative electoral research (Dalton, Flanagan, Beck, & Alt, 1984; Franklin, Mackie, & Valen, 1992; Rose & McAllister, 1986). This strand of research, which I refer to as the dealignment theory, proposes that social cleavages—which include social class and other socio-structural factors such as religion—do no longer explain political behavior in advanced industrial societies.<sup>1</sup> Hence, in post-industrial democracies, voters are considered

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<sup>1</sup> I borrow this terminology from Kitschelt and Rehm (2015b, pp. 180–185) who oppose the dealignment to the realignment thesis, and also contrast these two to the cartel party detachment theory. Because I

individualistic and rational actors that have freed themselves from any social bounds on their political behavior. This idea of voters being increasingly able to make a real choice and detaching themselves from socio-structural constraints is particularly well illustrated in the title of Rose and McAllister's (1986) work *'Voters begin to choose: from closed class to open elections in Britain'*.

The social transformations that the partisan dealignment literature proposes as explanations for this decline can instead serve as the foundations for new class-party linkages in post-industrial societies. The forces behind this alleged class dealignment are precisely the economic and social transformations that characterize the transition from industrial to post-industrial economies. These transformations can give rise to new forms of class divisions that ground new class-party alignments, as the post-industrial realignment thesis proposes (see below). Scholars announcing the end of the political relevance of social class claim that advanced industrial economies bring increasing material welfare and greater mobility (both social and geographical). As the economic consequences of class location weaken, the economic issues associated with class interests should also become of limited political salience. As class interests come to play a declining role in political choices, more individualistic and rational issues come to the fore (Dalton et al., 1984). Rises in the population's average levels of education and changes in the media structure also play a crucial role to explain the decline of class politics. With the growing size and diversity of the mass media, political information has become increasingly available. This, together with the expansion of education, promotes an informed citizenry with increasing levels of political efficacy, and capable of deciding from election to election what party to vote for based on: the issues of the day, the performance of government and opposition, and their evaluation of individual political leaders (Dalton et al., 1984; Thomassen, 2005). This process has been broadly characterized as the process of cognitive mobilization.

Besides cognitive mobilization, other scholars have placed greater focus on how social transformations might dilute the class basis of economic risks and conditions. In a more socially mobile and individualized society, the attachment to social class as a determinant of economic opportunities is weaker and, consequently, its implications for political preferences and

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focus exclusively on the demand side of electoral politics, in this overview of the literature I refer mostly to contributions within the dealignment and realignment strands. However, later, I also refer to the implications of the cartelization hypothesis, especially in chapter 3 where I study the moderating role of the supply side.

behavior should be weaker too. If economic conflict is no longer structured around class interests, neither should be political conflict. On this argument, the dealignment theory follows the debate on whether economic or social classes account for differences in life conditions and chances in post-industrial globalized societies.<sup>2</sup> Under growing social mobility among occupational classes, increasing multiplicity of labor market risks, and a greater instability of employment careers, it is expected that such social fuzziness will lead to political fuzziness (Clark & Lipset, 1991; Clark, Lipset, & Rempel, 1993). Under an extreme individualization of risk and inequalities—as proposed by Beck (2007)—there is no role for social class as an anchor of political preferences.<sup>3</sup>

Early evidence of partisan dealignment in post-industrializing economies was based mostly on measures that indicated a decline in the ‘industrial’ class-party association since fewer manual workers were voting for left-wing parties and more non-manual workers were voting for the right. Much of this early research was criticized, precisely, on the grounds that the measures implemented followed an industrial conception of class politics, and also because these measures were affected by changes in the marginal distributions of classes and parties (for a review of these measures see Weakliem & Heath, 1999). Later developments in these aggregate measures of class voting (such as the Kappa measure or uniform difference models) provided an improvement with respect to more simple measures like the Alford Index, since they did not impose specific class-party linkages. Nevertheless, these measures are appropriate only for unidimensional conceptions of political conflict (e.g. left vs. right) and neglect that additional dimensions may ground class-party linkages.

Even if some of the measures used in this research may be criticized, these studies still provided rather consistent evidence that class-voting in advanced economies was not constant, and that it may have been following a declining trend over time (or at least some time fluctuations). Franklin, Mackie and Valen’s (1992) study of 16 countries modeling voting behavior (left- versus right-wing voting) on class and other social characteristics, such as religion, trade union membership or education, finds a decline in the ability of social cleavages to structure individual voting choices. Similarly, Knutsen (2006) applies Erikson-Goldthorpe’s class scheme to study party choice among different party families in Europe, and finds a decline in class voting in certain countries (Denmark, The Netherlands, Britain and France).

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<sup>2</sup> For an overview of this debate see, e.g., Goldthorpe (2002).

<sup>3</sup> For a critique to Beck’s work see Bernardi (2007) or Atkinson (2007).

In spite of these empirical trends indicating either a decline or time fluctuations in class-voting, there are studies suggesting that social class still plays a role in explaining policy preferences and political behavior (e.g. Kitschelt & Rehm, 2015b; Kriesi, 1998; Rydgren, 2013). Moreover, criticism towards the dealignment thesis goes beyond the adequacy of the measures implemented, since it also questions some of the mechanisms it implies. According to the cognitive mobilization premise, for instance, increasing levels of education are at odds with a persistent influence of occupational class on political behavior. However, we find evidence of occupational divisions grounding political preferences and behavior within the middle class, a class holding comparatively higher levels of education (see e.g. Güveli, 2006). At the same time, research outside the class voting debate has found education to be positively related to the strength of partisan attachments, with educated individuals being less likely to change their party preference from election to election (Berglund, Holmberg, Schmitt, & Thomassen, 2005). Alternatively, other authors that could also be framed within the dealignment thesis have claimed that, in post-industrial societies, values have gained explanatory power at the expense of class (Inglehart, 1990), but as I will discuss in greater detail in this chapter, this does not rule out class effects if these values are socio-structurally grounded.

Lastly, many of the claims about the decline of class voting in current democracies are also grounded on the notion that social classes have become less relevant in structuring economic conditions and opportunities because of increasing material welfare, social mobility and educational expansion. If social classes do not determine life opportunities and economic risk, then the social and economic boundaries between classes are blurred, risk becomes increasingly individualized, and this leads to a certain degree of social fuzziness that is reflected in political fuzziness. However, even if post-industrialization entails great transformations in the occupational structure and in the relative size of social classes, economic opportunities and risk continue to be class-based. First, it is not clear that post-industrialization has led to an overall upgrading of the occupational structure. Indeed, post-industrial societies have seen an expansion of high-quality jobs, but this has sometimes occurred in parallel to the growth of low-quality jobs (Bernardi & Garrido, 2008; Oesch, 2013a; Oesch & Rodríguez Menés, 2010). Hence, while the relative size of the middle class has increased, if this occurs with a parallel growth of low-skilled service jobs, we will still observe differences in economic opportunity along the occupational structure. Secondly, even if absolute social mobility may have increased because of the growth of professional occupations, and educational expansion may have led to an overall upgrading, this does not preclude enduring class differences in relative mobility and

educational achievement (Breen, 2004; Breen & Jonsson, 2005; Esping-Andersen, 1993). In fact, class differentials in relative income, earnings, and educational or social mobility tend to indicate that relative mobility has changed rather little (Bernardi & Ballarino, 2016; Breen & Goldthorpe, 2001; Erikson & Goldthorpe, 1992). Economic opportunity and risk are still very much class-structured (Bernardi, 2009). In Europe, Nolan and Whelan (2011) find absolute and relative levels of risk of poverty and economic vulnerability to be unequally distributed along the class structure. Moreover, new class schemes that account for the kind of transformations occurring in post-industrial societies have been validated by showing how they differentiate classes in terms of economic outcomes (Güveli, 2006; Oesch, 2006b). These findings indicate that social class is still a relevant determinant of economic opportunity.

Even if class inequalities persist, it is true that—as many contributions within the dealignment thesis have emphasized—major social changes related to the transition to post-industrial economies have altered the composition of employment. The occupational structure of advanced Western democracies hardly resembles that of the 1960s on which many of the classical works on the association between class and politics were based. Hence, to study class voting today we need first to account for post-industrial occupational transformations.

### **Post-industrial changes in the occupational structure**

There are three intertwined phenomena that have been identified as the main contributors to post-industrial changes in the occupational structure: the globalization of markets and societies, technological change, and educational expansion (Bonoli, 2006; Esping-Andersen, 1992, 1999, Oesch, 2006b, 2013a). Together, these transformations have altered the economic activities, productivity gains and demand of skills in advanced economies, hence introducing considerable changes in the composition of the occupational structure. The transition to post-industrialized economies is characterized by a decline in the manufacturing sector and a concurrent growth of the service sector, the feminization of the labor force (especially in service occupations), and a growing weight of the state in the economy (although with cross-country variation). The relative decline of low-skilled industrial occupations is particularly relevant for the study of the social bases of political behavior in advanced economies because this group was at the core of classical theories of class voting.

Since the 1970s, European economies have undergone significant socio-economic transformations. Notwithstanding national differences, there are considerable similarities in how post-industrialization has altered the occupational structure across Western societies

(Bonoli, 2006; Esping-Andersen, 1993; Oesch, 2006b, 2013a). Regarding the composition of the occupational structure, the decline of the manufacturing sector—which began in earnest in the 1980s (Esping-Andersen, 1999)—and the parallel growth of the service sector is one of the key features of post-industrialized economies. Globalization and technological change have been especially adverse to low-skilled workers in the industrial sector, who have found themselves either obliged to compete in a global market against low-wage countries, or facing a declining supply of low qualified jobs due to technological change (Esping-Andersen, 1999; Taylor-Gooby, 2004). Coinciding with the decline in manufacturing, the massive expansion in access to education promoted the growth of professional and semi-professional positions, especially in the service sector. Overall, these trends reduced the relative weight of the industrial manual working class in the occupational structure.

The decline of the industrial working class, however, came along with a tertiarization of the economy and a growth of both low- and high-skilled service jobs. There are different understandings of how this has affected the overall skill composition of the job structure (Fernández-Macías, 2012; Oesch, 2013a; Oesch & Rodríguez Menés, 2010; Wright & Dwyer, 2003). It is not entirely clear whether the growth of the relative weight of the service sector has led to a hollowing-out of mid-skill occupations and hence to a bi-modal pattern of employment growth (occupational polarization), or whether most of the employment growth has occurred within high-skilled occupations (occupational upgrading) (Oesch, 2013a; Oesch & Rodríguez Menés, 2010). While there is variation in the skill composition of the service sector and in the relative weight of this sector in national economies, what matters for our concern with class voting and class-based preferences is that during the last decades of the 20<sup>th</sup> century the share of service jobs grew considerably across most OECD countries. Hence, post-industrial economies are characterized by an increasing share of service occupations (Oesch, 2006b).

Some authors have proposed that, although the rise of the service sector is quite generalized, the margin for the expansion of low- and unskilled service jobs might be constrained by national-level regulations and institutions (Bernardi & Garrido, 2008; Esping-Andersen, 1993, 1999). This would give rise to different regimes of post-industrial employment growth. These institutional constraints determine how economies respond to Baumol's model of unbalanced growth, and hence how the expansion of the service sector will affect the skill composition of the occupational structure. Baumol's cost disease arises because of productivity differentials in the manufacturing and service sector. This model of unbalanced growth presents three possible outcomes, the prevalence of which has been linked to national welfare



state institutions and regulations (Esping-Andersen, 1993, 1999). Where returns to labor in the service sector follow the increasing productivity of the industrial sector, low-skilled service labor will be overpriced, and this will hinder the expansion of low-skilled jobs in service occupations. This is likely to occur in economies where wage costs are high and earning distributions are more compressed (like in Continental European welfare states). The second outcome to Baumol's cost disease will develop in situations where service wages respond to (low) productivity gains in the service sector. In this context, we expect low-wage service employment to expand, especially in consumer services responding to a rising demand from private households. This pattern is expected to prevail in Anglo-Saxon (Liberal) welfare states, as well as in Southern Europe. The third possible outcome corresponds to those countries where state institutions subsidize wages of service occupations via public employment, hence maintaining a relatively higher portion of service jobs while avoiding a decrease in their salaries. This outcome should apply particularly to Nordic countries.

The size and composition of the low-skilled service sector, and of the post-industrial class structure more generally, might thus depend on the (de)regulation of the labor market, the demand for consumer and social services (whether in the private or public sector), families' welfare, and the extent of female labor participation (Bernardi & Garrido, 2008; Esping-Andersen, 1993, 1999). The low-skilled low-wage service class should be smaller in Continental Europe. In Nordic countries, in contrast, we expect a higher prevalence of low-skilled service jobs, mostly in care and social services publicly funded, and not low-paid. Lastly, low-skilled low-wage service jobs should be more prevalent in Anglo-Saxon and Southern European countries.

Post-industrial transformations have, therefore, led to a growth of professional occupations in the service sector, a decline in low- and unskilled industrial jobs, but also to an increase in low-skilled service jobs (although with variation across countries). This means that, in comparison to industrial economies, there is a greater diversity of occupations, most of which did not exist during the industrial era. Moreover, class inequalities persist and are manifest in class differences in relative social mobility, educational attainment, relative income mobility, poverty and vulnerability, and, as I discuss in detail below, in labor-market risks. Thus, to study class voting in post-industrial societies we must rely on class schemes that account for this diversity, and that, at the same time, reflect inequalities in the distribution of economic opportunity along occupations.

## **New classes in post-industrial societies**

To account for the post-industrial character of Western European economies, in this dissertation I implement Oesch's class scheme to operationalize class location. Adopting any class scheme implicitly entails adopting a definition of class. Social class is a highly disputed concept in social science and we can find different definitions and measurements of it. Oesch's class scheme is based on a 'weak' concept of class, or economic class (Kocka, 1980 in Oesch, 2006b, p. 13). This is so, because class is delimited to define groups that are homogeneous in terms of their common market condition and occupational profile, purposely omitting the inclusion of aspects such as class consciousness, collective action, community or antagonistic interests. Classes are socio-economic groups that occupy a similar position in the job structure. In this sense, Oesch's classes resemble Erikson and Goldthorpe's. Both approaches could be contained within a neo-Weberian market-based definition of economic class that focuses exclusively on economic aspects (Breen, 2005; Erikson & Goldthorpe, 1992; Oesch, 2006b). According to this definition of social class, class positions are profiles that exist independently of the individuals who occupy them, although this does not preclude class location from being related to certain individual traits. Implementing a measure of class location also means that social stratification is conceptualized in terms of categories, in contrast to other approaches that have favored a hierarchical continuum (e.g. Prandy, 2002). Using a categorical measure of social stratification is especially pertinent in the context of post-industrial societies where we find that certain class divisions, along Oesch's horizontal dimension, do not follow a hierarchical logic. As in other class schemes, such as Erikson and Goldthorpe's (1992) or Wright's (1985), the class scheme is based on a classification of occupations.

Oesch is not the only one that has addressed the implications of educational upgrading, the tertiarization of the occupational structure and the feminization of the labor force. His class scheme takes as a point of departure the class structure devised by Erikson and Goldthorpe (1992), but introduces further nuances according to a horizontal logic that is also reflected in other accounts of the post-industrial class structure (e.g. Esping-Andersen, 1993; Güveli, 2006). What these different post-industrial schemes have in common is that they attempt to reflect the increasing heterogeneity stemming from the tertiarization of the economy, especially among professional and semi-professional occupations. Indeed, different scholars have proposed their own criteria for separating different economic classes within professional and semi-professional occupations. Esping-Andersen (1992, 1993) argues for a division separating managers from professionals, claiming that managers are hierarchical creatures embedded in

bureaucratic structures, with supervisory responsibilities and authority over other workers; whereas professionals frequently stand outside the lines of command and, while they have autonomy in their jobs, they have little control over other workers. His distinction within the middle class between managers and professionals is operationalized according to employment sector, separating a Fordist occupational structure from a post-industrial service structure. Werfhorst and De Graaf (2004) propose to differentiate within the professional class the distinct position of social and cultural professionals, which are occupations that require instruction in fields of study that address social and communication skills. Likewise, Güveli (2006) separates a 'new' class of social and cultural specialists from an 'old' class of technocrats. Kriesi (1989, 1998), on his part, also distinguishes within the professional class, ending up with three different groups: (i) managers and administrators, (ii) professionals with specialized knowledge and technical skills, and, (iii) professionals with specialized expertise who are in close contact with clients or other addressees of their work.

While the division between a Fordist and a post-industrial status-hierarchy put forward by Esping-Andersen (1993) accounts for the horizontal diversity within both higher- and lower-grade occupations, the other proposed differentiations mainly focus on the middle classes. This is one of the main reasons why I draw on Oesch's class scheme to operationalize class, because his class structure provides a better account of post-industrial divisions not only among the professional classes, but also among lower-grade workers<sup>4</sup>. One of the contributions of this dissertation is to not only consider production workers when focusing on the political preferences and behavior of low-skilled workers, but also to take into account the growing section of service workers, and also workers in clerical occupations. Since the horizontal work logic divides classes at all vertical levels, this will allow me to compare horizontal divisions among professionals to those among workers. Moreover, Oesch takes Erikson and Goldthorpe's class scheme as a starting point, which provides some degree of comparability between both class schemes (especially when considering Oesch's vertical divisions) and allows me to build on earlier research on class voting, which was frequently based on Erikson and Goldthorpe's scheme.

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<sup>4</sup>Throughout this dissertation I will use the term 'worker/s' to refer to employees in lower-grade classes, in contrast to employees in higher-grade (professional or semi-professional) classes. Although the boundaries between the term worker and employee appear to be increasingly blurry (Oesch, 2006b, p. 48) and, indeed, scholars have increasingly used the term worker to refer generally to employees of different skill level, in this dissertation I use the term worker to refer exclusively to the low- and unskilled employee classes in Oesch's class scheme: production workers, service workers and office clerks.

Erikson and Goldthorpe's class scheme can be considered one of the most influential conceptualizations and operationalizations of social class in European sociology (G. Evans, 1992, p. 212). Notwithstanding the popularity and the extensive use of Erikson and Goldthorpe's scheme, research implementing Oesch's classes has become increasingly frequent, especially in accounts of 'new politics' (e.g. the support for populist right or green parties) (Knutson & Langsæther, 2015). In some cases, Erikson and Goldthorpe's scheme has been adapted to account for the particularities of socio-cultural specialists within the middle classes—who, at least attitudinally and politically, appear to differ from other middle-class professions (see e.g. Güveli, 2006). Implementing a modified version of Erikson and Goldthorpe's scheme might be an appropriate solution for those interested in the political behavior of the middle classes. However, in this dissertation I put a special emphasis on the political preferences and behavior of low-skilled workers. Moreover, one of the main purposes of this research is to study potential political divisions among the lower-grade classes and compare them to differences among the higher-grade classes. For this specific purpose, Oesch's class scheme presents a clear advantage, since it implements the same criterion—the work logic—to horizontally differentiate occupations at the upper and lower echelons of the class structure. Oesch's class scheme is especially appropriate for studying how classes differ on various dimensions of political conflict because it is likely to capture other aspects of work experience that can intervene in preference formation (as we know from the occupational socialization literature). In fact, in his analyses of policy preferences of different occupational groups, Kitschelt has argued that, although Erikson and Goldthorpe's measure may better capture the economic and social advantages related to a specific occupation (like market income or authority relations at the workplace) a measure such as work logic will provide a better account of the daily experiences in the work sphere (Kitschelt & Rehm, 2014, 2015b).

### **Class divisions based on work logic**

Oesch (2006a, 2006b) proposes a horizontal criterion that cuts across the whole occupational structure, both among higher- and lower-grade occupations. He defines horizontal class boundaries according to *work logic*: the daily work experiences associated with different occupations. He identifies three work logics for employees that differ with respect to: (i) the setting in which the work process takes place, (ii) the degree of authority relations, (iii) the primary orientation of the work, and (iv) the skill requirements for it; and he also defines a separate work logic for employers and the self-employed. Oesch's class scheme tackles two limitations from other class schemes that are problematic in post-industrial contexts: among

low- and unskilled occupations it eliminates any hierarchical meaning of the manual/non-manual divide, and among professional and semi-professional occupations it differentiates the situation of those in managerial positions, and those in service and technical professions. In contrast to differences of *levels* this horizontal work logic dimension captures differences in *kind* (Oesch, 2006b, p. 59). Moreover, in contrast to other occupational classifications such as Esping-Andersen's (1993) which are based on sector of employment, the horizontal division of work logic relies on a micro-sociological level of analysis.

In defining work logic as the dimension to horizontally differentiate classes, Oesch follows Kriesi (1989) and Kitschelt (1994), who identify daily work experience as a critical factor shaping people's political preferences. Early works in sociology of the occupations and professions also acknowledged the central role of the workplace as a site of adult socialization, and analyzed how different characteristics of occupations shaped personality, values and behaviors both within and beyond the work sphere (Kohn & Schooler, 1969, 1982; Mortimer & Lorence, 1979; Pateman, 1970). Work logic captures characteristics of jobs such as the work role and the position within the division of labor, the extent to which occupations are embedded within strong authority structures, and whether jobs entail dealing mostly with object and documents or with people. The different work logics, both for professional and low-skilled occupations require different kinds of skills that might not be easily transferable to a different work logic. In other words, individuals are socialized in different work logics in the context of their daily jobs, and this has consequences for their interests, loyalties and behavior, as I show in the different chapters of this dissertation.

The first horizontal differentiation separates employers and self-employed (independent work logic) from employees. Then, employees are divided into the organizational, technical or inter-personal service work logic. The organizational work logic is characterized by a clear command structure where, among the higher-grade occupations, the daily work entails coordination and control, whereas the low-skilled mainly execute clerical tasks. The focus of the work is towards the organization, and emphasizes loyalty towards it. Occupations in this logic have a great degree of involvement in organizational power. In this group of occupations, we find well-defined authority relations as well as a clear career ladder. In the technical work logic we also find a clear-cut command structure among low-skilled workers, who are embedded in an industrial division of labor. However, this clear hierarchical structure is not paralleled for professionals within this group. Professional technical employees are largely outside the lines of command, and their work is not focused towards the organization

but instead towards the scientific community (or to their trade among low-skilled workers). Low-skilled workers in this work logic rely on the deployment of craft and manual skills in their daily work. Lastly, in the inter-personal service logic we find that both professionals and low-skilled individuals work largely outside the line of command. In their daily job these occupations depend on social skills (or social expertise in the case of professionals), and the loyalty towards the employing organization is blurred by their focus on attending people's needs (clients', patients' or petitioners' demands). Because the work frequently entails face-to-face interaction and attendance to others' demands, the possibilities for the division of labor are quite scarce. These characteristics of the inter-personal service logic mirror Esping-Andersen's (1993) claim that hierarchical relations and command structures are flatter in the post-industrial service sector.

These different work logics capture many characteristics of the job and workplace that the occupational sociology literature considers as consequential for individuals' values and attitudes. For instance, the sociology of occupations and professions studies the kind of interactions and networks established in the workplace, such as the frequency and the nature of the interactions established with coworkers, supervisors, mentors or recipients of the work. It also considers to what extent these interactions are embedded in strict hierarchies or instead entail negotiation processes among equals (Ashford & Nurmohamed, 2012). These same characteristics of the job are captured by two of the dimensions that define the work logics: the degree of authority relations and the primary orientation of the work. The relations of authority and the setting of the work process are also related to another trait considered relevant in the sociology of occupations: whether individuals have opportunities to exercise self-direction and use initiative in the development of their work, or whether they need to conform to externally imposed rules (Kohn & Schooler, 1982). Hence, we find that Oesch's class scheme systematically and parsimoniously captures salient differences in occupations that are likely to be associated with attitudes and behaviors.

Table 1.1 below summarizes Oesch's class scheme and provides some examples of typical occupations within each class. The horizontal axis separates the three work logics and the self-employed, and the vertical axis divides classes according to the level of marketable skills of the occupation. The detailed 17-class scheme can be simplified into an eight-class scheme (the groups divided by solid lines). This simplified version distinguishes four low-skilled and unskilled (or routine) classes—the production workers, inter-personal service workers, office clerks and small business owners—as well as four professional and semi-

professional classes—technical professionals and technicians, socio-cultural professionals and semi-professionals, managers and associate managers, and self-employed professionals and large employers. Because of the limitations imposed by the availability of data, throughout this dissertation I operationalize class based on the simplified eight-class scheme. Appendix 1.A presents the correspondence between ISCO codes and Oesch’s classes. We can illustrate the occupations in each of the classes by means of examples based on some of the most frequent occupations within each class in the United Kingdom. Among production workers we find industrial machinery mechanics (in the skilled crafts class) and manufacturing laborers, routine truck drivers, and products assemblers (in the routine operatives class). Accounting and book-keeping clerks are examples of occupations in the skilled office class, while receptionists, information clerks, and tellers and other counter clerks are part of the routine office class. Among service workers, we find police officers and skilled child-care workers as skilled employees, while routine shop salespersons and helpers and cleaners in establishments are part of the routine service group. In the professional classes, computer systems analysts, programmers, and physical and engineering science technicians are part of the technical professional and semi-professional classes (respectively). Finance and administration managers, and legal associate professionals are part of the managerial, and associate managerial and administrative classes. Lastly, secondary education teaching professionals and nursing associate professionals are classified as socio-cultural professional and semi-professional employees.

Because of data limitations with regard to the number of observations present in different occupational groups, throughout the dissertation I rely on a simplified eight-class version of Oesch’s scheme. Inevitably this means that some of the specificity and the variation between classes along the vertical dimension is lost. While Erikson and Goldthorpe’s class scheme, in its simplified version, is more detailed regarding hierarchical class divisions, Oesch’s measure provides a better account of horizontal differentiation. Moreover, in its simplified version, Oesch’s scheme still separates the occupational groups that constitute the main focus of this dissertation—namely production and service workers—and allows for a meaningful comparison with the horizontal division among professional classes. In fact, one of the motivations of Oesch’s scheme is to address a limitation of Erikson and Goldthorpe’s scheme: the division within class III (routine non-manual employees) and where to locate class IIIb (lower-grade routine non-manual employees) in a hierarchical setting distinguishing between different employment relationships (Oesch, 2006b, p. 45). While some studies have compared

the vertical location of class IIIb to that of class IIIa, others have merged the former with class VII (Oesch, 2006b, p. 44). Because I am interested in implementing a measure that explicitly separates the particular nature of occupations in the service sector, that takes into account the multidimensionality of work experiences and that, at the same time, relies on a similar criterion to capture the diversity in both professional and low-skilled occupations, Oesch's scheme is the most appropriate tool for these purposes.

**Table 1.1: Oesch's class scheme**

Self-employed		Employees				
Independent work logic		Technical work logic	Organizational work logic	Interpersonal service work logic		
Large employers (>9) Firm owners Salesmen	Self-employed professionals Lawyers Accountants	Technical experts Mechanical engineers Computing professionals	Higher-grade managers and administrators Business administrators Financial managers	Sociocultural Professionals University Teachers Journalists	Professional/ Managerial/	Marketable skills
		Petite bourgeoisie with employees (<9) Restaurant owners Farmers	Technicians Electrical technicians Safety inspectors	Associate managers and administrators Managers in small firms Tax officials	Sociocultural semi-professionals Primary school teachers Social workers	
Petite bourgeoisie without employees Shopkeepers Hairdressers		Skilled crafts Machinery mechanics Carpenters	Skilled office Secretaries Bank tellers	Skilled service Children's nurses Cooks	Generally/ Vocationally	
		Routine operatives Assemblers Machine operators	Routine agriculture Farm hands Loggers	Routine office Mail sorting clerks Call center employees	Routine service Shop assistants Home helpers	

Source: Oesch (2006b)

Table 1.1 provides an overview of the scheme with some of the most common occupations in each of the classes. While the employers and the self-employed are classified into these classes based on their employment status and number of employees, employees are classified into different work logics and into different vertical levels based on their occupational titles (see Appendix 1.A for further detail). In this dissertation, I follow Oesch's coding of occupations (as measured by the International Standard Classification of Occupations, ISCO) into classes. The ISCO classifies jobs according to tasks and duties, as well as to skills. In line with Oesch's work, I implement a cross-national approach by which all occupations are coded into the same classes in different countries. Some authors have suggested that the job characteristics associated to the same occupations can vary between countries (Breen and Rottman, 1995, p.460, in Oesch 2006b). To be able to assign them to different classes, however,



requires a level of information of systematic cross-national variation between occupations that is not available at this time, especially when considering the broad cross-national analyses implemented in this dissertation.

### **Class voting in post-industrial societies**

Implementing this and other related operationalizations of the class structure, different scholars have studied new patterns of class-party alignments in post-industrial societies. After having reviewed how class is operationalized in this dissertation, it is pertinent to briefly address the concept of class voting. Across the literature, and especially in the debate on whether class voting is in decline, we find different understandings of this concept. What some scholars have understood as evidence of class dealignment, others have interpreted as a sign of new class-party alignments. Part of the disagreement has been about what should be considered as class voting and how to measure it. Following Hout, Manza and Brooks (1999) and Mair (1999), I characterize class voting as a tendency for classes to hold similar political preferences or attitudes, and to display similar patterns of political behavior. In this sense, class voting will occur as long as individuals in a class vote similarly to other individuals within that class, so that the group behaves homogeneously but differently from other groups. Class voting implies that classes vote more or less as one, but not that their object of voting (the party preferred) should take on a specific ideological position or belong to a particular party family.

In this dissertation, I start by defining occupational classes based purely on their economic position, and then assess whether these divisions are reflected in political preferences and behavior. As Mair (1999) argued, a minimum level of class voting requires that individuals within the same class vote as one, even if the object of their preferences changes from one election to another. This insight is crucial because the decline in left-wing support among blue-collar workers has been frequently presented as evidence of a decline in class voting, but this does not have to be the case if this group of workers still votes together, even if they vote for a non-left-wing party.

### **The post-industrial partisan realignment thesis**

The partisan realignment framework does not dispute that party attachments have shifted in contemporary Western democracies but, in contrast with the dealignment thesis, contends that party preferences are still anchored in social class and other socio-structural divisions. By allowing for different patterns of class-party association beyond the traditional

opposition between a left-wing working class and a right-wing middle class, recent research casts doubts on the picture of great political fuzziness and volatility advanced by the dealignment thesis, and supports the idea that there is still a class basis—even if of a realigned kind—to post-industrial politics (Hout, 1999; Kitschelt & Rehm, 2014; Kriesi et al., 2008).

Already in the 1980s and 1990s we find that some of the trends that could be conceived as a sign of dealignment could also point to a political realignment being underway. Weakliem and Heath (1999) find evidence for changing alignments in the United States, with professionals and white-collar workers increasingly supporting the Democrats, while farmers increased their allegiance to the Republicans. These trends appeared to be paralleled by an increasing political division within the middle class in both the US and Britain. Hout, Manza and Brooks (1999) find that the decline in the traditional alignment of working class versus middle class in the US was partly in favor of a new form of realignment. Both Lipset (1960) and Inglehart (1990) also identified that a new alignment cutting across the manual/non-manual division was becoming stronger. Research that can be framed within the realignment thesis has precisely focused on the explanation of these new forms of partisan alignments, which, at first, seemed ‘unnatural’ from an industrial perspective. This is the reason why, much of the realignment research has focused on industrial workers’ support for radical right-wing parties, or middle-class voters’ support for left-wing parties. Hence, the argument has not been that social classes do not matter anymore, since class alignments are still apparent. Rather, this strand of research has focused on how occupational classes are differently related to policy preferences and ideology in post-industrial societies and how this, in turn, affects party choices.

The ‘unnatural’ realignment of classes and parties can be related to the preferences of different social classes on cultural issues. Studies that have found an increasing role of non-economic values and preferences (such as environment protection, civil rights, or quality-of-life issues) in structuring political conflict argue that this is in detriment of class voting. Inglehart (1997), for instance, implies a trade-off between the relevance of political cleavages based on the class conflict and those based on a cultural or value conflict (postmaterialist issues). Nonetheless, by definition, there is no direct opposition between the rise of new issues and class voting, this will ultimately depend on whether there is a class basis to these issues and preferences. In fact, the increasing salience of the cultural dimension of conflict has been central within the realignment thesis and its account of the current sociological underpinnings of party attachments. Referring to cultural and value issues has helped to account for

'unnatural' patterns of voting, and has also indicated a socio-structural basis of differences in values and cultural preferences.

The relevance of the cultural dimension of conflict is not exclusive of post-industrial societies. For example, Lipset and Rokkan (1967) already recognized religiosity as a powerful predictor of voting behavior. As De la O and Rodden (2008) have shown, values and religiosity have affected preferences and voting since the 1970s, and this issue dimension that cuts across the economic cleavage could account for unexpected party attachments (such as right-wing support among the poor, or wealthy leftists). However, the salience of the cultural dimension appears to have increased during the last decades of the 20<sup>th</sup> century, evidencing a normative conflict that is represented, politically, by the opposition between new left and radical right parties (Kriesi, 2010; Oesch, 2013b). Different issues have been considered as belonging to the cultural dimension of conflict. One of the most widely implemented conceptualizations of the cultural conflict captures the opposition between a libertarian or GAL (Green-Alternative-Libertarian) pole and an authoritarian or TAN (Traditional-Authoritarian-Nationalist) pole (Bakker, Edwards, Jolly, Polk, & Rovny, 2010; Hooghe, Marks, & Wilson, 2002; Kitschelt, 2004). Within this cultural dimension, during the 1990s and 2000s the issues related to globalization, such as European integration, immigration, and nationalism increased in relative salience (Kriesi et al., 2008, 2012).

Taking into account preferences on the cultural dimension has evidenced that the middle class has become increasingly divided in terms of policy preferences and partisanship, and that differences are especially notable on cultural issues. Socio-cultural professionals hold more libertarian preferences than technical professionals or managers (Achterberg, 2006; Güveli, 2006; Kitschelt, 1994; Kitschelt & Rehm, 2015b; Oesch, 2006b). This has been further linked to a higher likelihood, among the former, of supporting left-wing parties, especially new-left parties. Although the main focus (and the biggest class differences found) are related to cultural issues, economic preferences are also divided within the middle class, with socio-cultural professionals being more favorable towards income redistribution, welfare spending and government intervention than the two other middle classes of Oesch's scheme (see e.g. Häusermann & Kriesi, 2015; Kitschelt & Rehm, 2014; Kriesi et al., 2012).

Although horizontal divisions based on work logic cut across the whole occupational structure, horizontal differences in preferences and behavior between classes located at similar skill-level have been mostly studied for the middle class. Comparatively, systematic

assessments of differences among workers are scarcer and less theorized, although we also find piecemeal evidence of political divisions within this class (Bornschieer & Kriesi, 2013; Lachat & Oesch, 2007; Oesch, 2008a). Some studies that have looked specifically at the impact of occupational classes on political preferences (e.g. Kitschelt & Rehm, 2014) have not differentiated between workers at the bottom of the social structure. Moreover, the focal point of research on workers in post-industrialized societies has been on what was described as ‘unnatural voting’ by production workers for the populist right (Houtman et al., 2008). The existing research has found that production workers tend to hold culturally authoritarian preferences, so that under the growing salience of cultural issues (such as anti-immigration issues) they will tend to support the populist right (Oesch, 2008a, 2013b; Spies, 2010).

While there is considerable evidence about production workers’ realignment with populist right parties, we know substantially less about the preferences and behavior of the lower-grade service and clerical occupations. Workers in different work logics could differ not only in terms of their political preferences, but also in terms of their propensity to engage in political participation. Initial evidence suggests that low-skilled service workers might be less likely to participate in elections altogether (Bornschieer & Kriesi, 2013). This could be because the heterogeneity within unskilled service occupations plays against their mobilization (Bernardi & Garrido, 2008). Existing research also suggests that production workers are more likely to support the populist right than inter-personal service workers (Arzheimer, 2013; Bornschieer & Kriesi, 2013; Oesch, 2008a), although there are cases in which the radical right also succeeded in obtaining support from the latter (Oesch, 2013b; Oskarson & Demker, 2013). Overall, it is less clear what differences we should expect among low-skilled workers because much of the literature has focused on production workers.

Besides work logic, another factor that has been frequently considered because of its potential for dividing social classes and its prevalence in post-industrial societies is atypical employment. Recent literature has stressed the increasing prominence of atypical employment careers in post-industrial economies (Davidsson & Naczyk, 2009; Emmenegger, Häusermann, Palier, & Seeleib-Kaiser, 2012a; King & Rueda, 2008; Rueda, 2005). All forms of employment that differ from full-time, stable, fully insured employment, mostly taking the form of fixed-term or involuntary part-time employment have been considered forms of atypical employment (Häusermann & Schwander, 2012). Initially, the political implications of the division between labor-market insiders and outsiders were theorized and studied for workers (King & Rueda, 2008; Rueda, 2005). However, this form of economic risk is, by definition, not restricted to only

certain classes. In fact, part of the literature on the differences between insiders and outsiders has argued that outsidership can affect individuals across the occupational structure (for a review see Davidsson & Naczyk, 2009). However, other work indicates that atypical employment is concentrated on specific occupational groups such as the routine unskilled workers, and especially service workers (King & Rueda, 2008). Although this does not constitute the focus of this dissertation, because atypical employment has been related to political orientations and because this form of economic risks could particularly affect certain classes, we need to account for atypical employment, at least as a control variable, when analyzing the association between class and political preferences.

### **Implications of existing research**

A review of the recent work addressing the link between class and politics suggests that post-industrial transformations have not necessarily led to class dealignment. There is evidence indicating that class-based economic inequalities persist, and that classes still differ in terms of political preferences. It is also apparent that the debate on class voting in post-industrial democracies is far from being settled. Nevertheless, we can safely affirm that, at least, there is no evidence of a univocal trend towards political class dealignment. So far, the review of the existing literature has primarily focused on the demand side of electoral politics, since this constitutes the main focus of this dissertation. However, there are a number of studies that have argued that we may find the link between class and electoral behavior to have weakened because of changes in the partisan supply (Elff, 2007, 2009; G. Evans & De Graaf, 2013a; G. Evans & Tilley, 2012a, 2012b, 2017). These changes are, however, neither generalized nor inevitable. In contrast to the dealignment thesis, this work argues that class inequalities and class differences in issue and policy preferences persist, but that these differences cannot be translated into distinct class-based party choice because parties do not provide real policy alternatives that mirror class interests. According to these authors, parties have increasingly catered to the middle class—something that has been widely studied for social-democratic parties (see e.g. Keman, 2011)—and diluted their policy profiles. If parties do not provide distinct choice alternatives to voters, then differences in preferences between classes cannot be expressed through the vote. This work emphasizes the crucial role of the supply side in electoral politics: where there are no real alternatives (at least in terms of the policy issues on which social classes differ) there cannot be real choice. This approach provides an explanation for the conflicting findings from the dealignment and realignment frameworks.

Studies within the post-industrial realignment thesis and studies emphasizing the relevance of the supply side have sometimes followed a two-step approach to understanding class voting. The first step concerns whether social classes differ in their political interests and preferences (see e.g. G. Evans & De Graaf, 2013a; Häusermann & Kriesi, 2015). If social class does not ground distinct issue preferences, then it is unlikely that we will observe class differences in party choice.<sup>5</sup> Then, a second step in the analysis, assesses the link between social class and party choice. In this dissertation, I also follow this two-step approach. Chapter 2, which serves as the starting point for the analyses in later chapters, starts by considering whether and how social classes differ in terms of economic and cultural preferences. In later chapters, and after having found that there is an association between class location and preferences, I consider party choice and look deeper into the association between class location and preferences, and into some moderating factors that intervene in this relationship.

Many of the recent studies on class voting have revolved around the question of whether we do or do not observe class voting in post-industrial societies. In other words, the scholarship has put considerable effort into quantifying the association (or the lack thereof) between class and political preferences, or in identifying new patterns of class-party alignments (e.g. Knutsen, 2006; Nieuwbeerta & De Graaf, 1999). However, less focus has been placed on potential moderators in the association between class and preferences (with the clear exception of the literature focusing on the supply side) (e.g. G. Evans & De Graaf, 2013b), or on the mechanisms underlying this association. One of the contributions of this dissertation is to look deeper into the association between class, preferences and party choice, by identifying moderators in this relationship (such as the politicization of issues by political parties or the time an individual has spent in a specific class) and by addressing it from a longitudinal individual-level perspective (studying class tenure and class mobility). This research further contributes to current analyses on class voting by systematically placing a special focus on a section of the electorate that has not, so far, been studied comprehensively: low- and unskilled workers.

Some of the most consistent findings on realigned party linkages have been found for the middle classes, especially for socio-cultural professionals and their increasing support for

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<sup>5</sup>It is possible that, even in the absence of distinct class-based policy preferences, social classes still differ in terms of party choice. This could be due to class differentials in evaluations of a candidate, to descriptive representation or to clientelistic links. However, our interest here lies in class politics and class voting as a representation of class interests.

left-wing parties. This means that there is a substantial amount of research addressing preferences and behavior within the middle class, distinguishing different occupational groups within it by work logic, sector of employment, or field of studies (Güveli, 2006; Güveli, Need, & De Graaf, 2007; Kitschelt & Rehm, 2014; Kriesi, 1989; Müller, 1999). This, however, has not been paralleled by a comparable effort in assessing differences based on work logic among lower-grade classes. Instead, for low-skilled workers, the focus has been mostly on whether and why production workers have increasingly aligned with extreme right-wing parties, but less is known about other low-skilled workers, such as those employed in the inter-personal service work logic.

It is surprising to find that these studies have not placed greater attention on workers if we consider recent shifts in the relative weight of these classes in the occupational structure. While production workers are a class in decline in terms of size, low-skilled occupations in the service and clerical occupations have expanded in post-industrial societies (Oesch, 2013a). Studying their political preferences is, thus, increasingly relevant to understand the potential for new class-party alignments. Moreover, whether these workers display distinct preferences and electoral behavior from production workers can have important consequences for the mobilization of these classes by parties, and for overall class inequalities in political representation.

Production workers' support for the populist right undermines the working-class base of social democratic parties, and one of the basic alignments of industrial politics. Production workers are, however, a class in decline (although with variation across countries in this trend). If other low- and unskilled occupations, such as service workers, are more likely to support social democratic parties, this could mean that these parties would be able to maintain a working-class profile (even if of a 'new' or 'post-industrial' kind). If, instead, service workers also tend to support the populist right, this would further confirm the limited working-class appeal of social democratic parties. However, production and service workers' homogeneity would also entail the potential for a sizeable 'working-class' electoral coalition. If, on the contrary, workers in different logics are not homogeneous in their political orientations, this would imply, first, that the traditional 'industrial' vertical opposition between higher- and lower-grade classes would be further diluted due to the heterogeneity within both the middle and the working classes. This could, in turn, entail a growing potential for cross-class electoral coalitions across vertical divisions. Secondly, seeing how the production working class is in decline, if other workers do not share similar preferences, this would reduce even further the

likelihood that parties will cater to this declining section of the electorate and represent their interests. If, however, workers in different work logics display similar political preferences, this could provide a potential coalition of disadvantaged workers and revitalize 'old' patterns of class politics, even if in the form of new partisan alignments.

### **Structure of the dissertation**

Chapter 2 starts by assessing how social classes differ in issue preferences and ideological placement. Although the focus is placed on the comparison between lower-grade classes in different work logics, the analyses are conducted for all occupational classes (professionals as well) since these other classes serve as a point of comparison. Moreover, studying class differences in preferences serves as the first step to look deeper into the association between class location, issue preferences and political behavior in later chapters. Class differences in preferences are analyzed by relying on issues in both the economic and cultural dimensions of political conflict, as well as on ideological self-placement. The analyses in this chapter (based on pooled ESS data from 30 European democracies) indicate that, although we find class location to be related to issue preferences and ideology, the heterogeneity among workers in different work logics is moderate. Moreover, this occurs despite stark differences in the demographic composition of the lower-grade classes. This chapter also provides interesting insight into the unconditional and conditional differences between classes, as well as on class differences in the variance of preferences.

As mentioned above, existing literature has indicated that patterns of employment growth, especially the size of the low-skilled service sector, may differ across countries because of the constraints placed by national institutions and regulations to the expansion of low-wage service jobs (Bernardi & Garrido, 2008; Esping-Andersen, 1993, 1999). For this reason, chapter 2 assesses how Oesch's class location relates to demographic characteristics and labor-market risks first in a pooled dataset of European countries, but also separately by clusters of countries (grouped according to expected patterns of post-industrial employment growth). These analyses indicate that, although there is some cross-national variation, the differences across country clusters are rather minor. These relatively small group differences also appear when addressing the association between class location and issue preferences. In chapter 2, I assess how the differences in policy preferences between production and service workers differ across groups of countries (relative to those found in the pooled dataset). Because of the similarities identified across clusters, in the following chapters I base the analyses of the differences



between production and service workers on the pooled sample of European countries, without making further distinctions based on welfare state regime or pattern of employment growth.

After observing in chapter 2 that there is a link between class location and political preferences, the analyses in chapter 3 assess whether the size of class differences in preferences is context-dependent. Although the main focus in this dissertation is on the demand side of electoral politics, this chapter includes characteristics of the supply side as moderators in the association between class location and preferences. As Evans and Tilley (2012a, 2012b) argue (see also Elff, 2009; G. Evans & De Graaf, 2013a) social class will be associated with party choice to the extent that parties take distinctive positions on class issues. Based on the contributions from this strand of research and from studies in political psychology, I argue that the partisan supply also plays a relevant moderating role in the association between class and preferences. Because holding specific policy preferences in line with one's political predispositions is a cognitively demanding process, I propose that the extent to which parties emphasize and take distinct positions on a specific issue will moderate the association between class and preferences. In addressing the moderating role of the supply side this chapter provides an additional contribution to the literature on class voting. It indicates which kind of class coalitions are likely under different configurations of the partisan supply, and under what conditions we will find greater differences in policy preferences among workers.

After having considered how classes differ in their issue preferences and ideological placement across different contexts, chapter 4 analyzes whether these differences in preferences are paralleled by differences in electoral behavior. Moreover, this chapter also addresses the question of whether preferences on issues guide party choice. If we find that classes vote differently, and that the vote is driven by specific issue preferences, this would provide evidence in favor of persisting class-based instrumental (or programmatic) voting. The first part of the chapter analyzes the association between class location and electoral behavior without imposing specific associations between classes and parties, and considering the full choice set available to voters (not only different party families but also abstention). Also in this chapter, I pay special attention to the comparison between production and service workers. The findings are very much in line with the propositions of the post-industrial realignment thesis, but also with accounts of the relevance of the supply side. This chapter also emphasizes the importance of studying different party families, since our conclusions about the state of class voting can depend on the parties we focus on. The second part of the chapter makes another important contribution to the scholarship on class voting. After observing that classes

differ in preferences and electoral behavior, it estimates to what extent distances between parties and voters on different dimensions ground party choice. This has interesting implications for whether class voting might be programmatic, and whether electoral behavior is guided by class interests. Empirically, I estimate the impact of distances between voters and parties (on different issues) on electoral behavior by means of conditional logistic regression models. Moreover, I also consider whether the weight placed on issues of different nature varies by occupational class.

### **A longitudinal approach to class voting**

The first three empirical chapters address class voting based on cross-sectional analyses. They provide evidence of an association between class location and voting at the individual level that is partly accounted for by class differences in preferences on economic and cultural issues. However, one of the limitations of these analyses is that they implicitly assume that all respondents are equally stable occupants of the class location they hold at the time of being interviewed. Taking into account that individuals may differ in the time they have been incumbents of a specific class location, or that they may move through different classes during their employment careers seems particularly relevant in the context of post-industrial societies, in which—as the dualization literature has indicated—weaker forms of attachment to the labor market have become more common and employment careers tend to be more frequently interrupted (Davidsson & Naczyk, 2009; Emmenegger, Häusermann, Palier, & Seeleib-Kaiser, 2012b). Since post-industrial transformations have been associated not only with changes in the composition of the occupational structure, but also with increasingly unstable employment careers, this should be taken into consideration in a proper account of post-industrial class voting. For this reason, the cross-sectional analyses in the first chapters are complemented with a longitudinal approach in chapters 5 and 6. A longitudinal perspective does not only allow me to assess the implications of class stability and mobility for political preferences, but it also provides the opportunity to contribute to one of the key debates in the class voting literature: whether class differences in political preferences stem mainly from socialization or from selection effects.

Chapter 5 starts by considering the importance of class tenure (i.e. the period of time that an individual has spent in a specific class location) as an individual-level moderator in the association between class location and political preferences. Building on the scholarship on class formation and on sociology of occupations, this chapter postulates that class differences

in preferences should be largest among respondents who have been long-term incumbents in their class location, whereas among individuals who have recently entered a new class differences in political preferences should be comparatively smaller. The moderating role of class tenure is tested for preferences on economic and cultural issues, as well as for party preferences. The results from these analyses, based on data from the BHPS, indicate that, indeed, tenure is a relevant moderator in the association between social class and political preferences.

After having considered the importance of permanence in a specific class location, chapter 6 moves on to study class mobility and its impact on political preferences. Surprisingly, longitudinal analyses of class voting have been rather infrequent, and we also find scarce theoretical elaboration on the impact of intra-generational class mobility on political preferences. Building on the insights from the literature on inter-generational class mobility (De Graaf, Nieuwbeerta, & Heath, 1995; De Graaf & Ultee, 1990; Nieuwbeerta, De Graaf, & Ultee, 2000) and from one of the few studies that have addressed how intra-generational mobility affects electoral participation (Lahtinen, Wass, & Hiilamo, 2017), this chapter addresses the gradient constraint hypothesis. This hypothesis proposes that individuals who have experienced mobility will display preferences or behavior that is more moderate than that of immobile individuals in the class she is coming from or moving into. In contrast to earlier research on inter-generational mobility, which implemented uni-dimensional operationalizations of the class structure, this chapter addresses both vertical and horizontal class mobility. The results indicate that, indeed, mobile respondents (whether vertically or horizontally) tend to display economic preferences that are more moderate than immobile respondents. Thus, in contexts of higher levels of aggregate class mobility we would expect class differences in preferences to be diluted.

Although based exclusively on data from the British case, these two chapters provide further insight into the mechanisms of the association between class and preferences at the individual level, which could be generalized to other contexts. Both chapters also contribute to the debate of whether the association found between class and preferences is a consequence of selection or socialization effects. Even if these chapters cannot test whether one or the other prevails, the empirical results provide evidence of socialization effects being at work, since class differences in preferences become stronger as class tenure increases, and since class mobility is associated with changes in economic preferences.



## **Chapter 2**

# **Class differences (and workers' similarities) in policy preferences in post-industrial democracies**

### **Introduction**

The previous chapter introduced the debate on whether class-party alignments were in decline in deindustrializing democracies. One of the disagreements in this debate concerns whether different classes still hold distinct policy preferences, or whether they have become politically undistinguishable. Following the two-step approach to understanding class voting presented earlier, the first thing we need to consider is how classes (as defined by Oesch's class scheme) differ in terms of their issue preferences. If we find that classes do not differ in their policy profiles, it is very unlikely that they will do in their political behavior. Thus, following this understanding of class voting, this first empirical chapter addresses the association between Oesch's class scheme and preferences on four different issues and on ideological self-placement.

As I also pointed out in the previous chapter, research on post-industrial partisan realignment has invested considerable effort in studying how the growth of the service sector and the expansion of more flexible task structures within it have created new divisions or cleavages within the middle classes (Güveli, 2006; Oesch, 2006b; Werfhorst & De Graaf, 2004). The division of the middle class into different groups—socio-cultural professionals, managers and technical experts—and research on the policy preferences of each of these groups has shown that the middle class cannot be considered as a monolithic bloc anymore, and that there are substantial differences in terms of policy and issue preferences within this group.

The attention devoted to study politically relevant divisions within the middle class has not been paralleled by a similar effort among workers, even though there are manifest changes in the behavior of this group, such as the shifting support for radical right parties, the dealignment from social-democratic parties, or the increasing prominence of left-authoritarian preferences among workers (Houtman et al., 2008). These issues have been at the heart of recent research on class voting, although the approach to them has been rather different than in the study of the middle classes, where the concern was mostly about rising divisions within the group. Much of the research on the working class has not focused on its divisions but has been mostly concerned instead with the (changing) political behavior of production workers

(e.g. Arndt & Rennwald, 2017; Houtman et al., 2008; Rennwald, 2013). The behavior and preferences of service workers and office clerks, in comparison, has been less frequently analyzed, and often only as part of larger inquiries that did not specifically focus on the differences between workers. A comprehensive account of how occupational changes related to post-industrialization have affected the political behavior of those workers located at the lower end of the social structure, as well as of whether this has given rise to new divisions within this social group is hence a relevant contribution to the post-industrial class voting literature. Especially if we take into account that production workers constitute a class in numerical decline in deindustrializing societies, while low-skilled service occupations are on the rise. Moreover, whether low-skilled workers are divided also has implications for the strategies of traditional working-class left-wing parties or for new parties attempting to cater to these voters.

In this chapter, I start by studying the association between an individuals' position in Oesch's class scheme, which specifically accounts for the increasing heterogeneity of social stratification in post-industrial societies, and his or her preferences on different policy issues. Although the focus is placed specifically on the differences that appear among workers, I include in the analysis the whole class scheme, and hence take into consideration also the preferences of the middle classes. The middle classes will also serve as a point of comparison to assess whether the horizontal differences that the literature has found within this group are replicated for low-skilled workers. Moreover, this chapter studies preferences on four different issues that tap into the economic and cultural dimensions of political conflict.

The analyses indicate that, in post-industrial societies, we find an increasing heterogeneity in the social structure, with horizontal occupational divisions accounting for differences in policy preferences. Horizontal differences, however, are larger for the upper echelons of the social structure than for workers. As already pointed out in existing studies, particularly socio-cultural professionals appear as a distinct group from the other middle classes. In what concerns workers, in spite of the considerable differences between the industrial and the service working class in terms of their age and gender composition, these two groups are relatively homogeneous in their issue preferences. Furthermore, this is a working class that is characterized by holding left-authoritarian preferences, when compared to other occupational classes. The last section of this chapter also considers the variance in classes' preferences. Since classes may differ in the heterogeneity of their composition or in the diversity of occupations and work settings they encompass, this could be reflected in the

dispersion of individuals' preferences within these classes. Moreover, the variance of these preferences could also have implications for the likelihood that classes' demands are mobilized by political actors. We can presume that it is more difficult for parties to cater to classes with more dispersed preferences.

### **Theoretical background**

To assess whether class-based political differences persist in post-industrial societies and to understand new patterns of class-party alignments, we need to first address the question of the association between class location and issue preferences. The post-industrial realignment literature has indicated that, to account for the increasing political heterogeneity across the occupational structure, it is necessary to consider preferences on more than one dimension of political conflict. Within this strand of research, preferences on the cultural dimension have been crucial to explain new forms of 'unnatural' alignments, such as middle-class support for new-left parties or working-class support for populist right parties. For this reason, in the following analyses I study how classes differ on policy issues that are embedded in different dimensions of conflict.

The notion of voter preferences in Western democracies being articulated around more than just one dimension (the economic conflict) is certainly not new to the post-industrial context. In fact, religious or center-periphery cleavages have been widely studied before (De La O & Rodden, 2008; Lipset & Rokkan, 1967). The specificity of the post-industrial context is that it has induced a process of diversification within the social structure so that groups such as social classes differ from one another on more than one policy dimension. The most frequent approach has been to conceptualize the political space as composed of two dimensions: one economic and one cultural.

The cultural dimension captures the opposition between a libertarian or GAL (Green-Alternative-Libertarian) pole and an authoritarian or TAN (Traditional-Authoritarian-Nationalist) pole (Bakker et al., 2010; Hooghe et al., 2002; Kitschelt, 2004). Along this axis, the libertarian position stands for free and equal interaction among people, and is respectful and tolerant of others (including those who deviate from one's own norms or the norms of society). The authoritarian position, on the contrary, favors social hierarchy and compliance with authority, and stands for a social life governed by compliance with collectively shared, uniform norms and regulatory principles (Kitschelt & Rehm, 2015b; Stubager, 2008). Within this dimension, during the 1990s and 2000s the issues addressing globalization, such as European

integration, immigration, and nationalism (as a form of defense of the national identity and the national community) increased in relative salience (Kriesi et al., 2008, 2012). Although the conceptualization of a bi-dimensional conflict structure has been quite frequent, other scholars (e.g. Kitschelt & Rehm, 2015b) have argued for a conflict structure of greater dimensionality. In this chapter, and throughout this dissertation I do not aggregate issues into dimensions but rather consider them separately. There are three items I consider that could be framed within the cultural dimension: attitudes towards immigration, tolerance towards homosexuality and preferences over European integration. Because European integration concerns both economic and cultural aspects it is not entirely clear that it is part of the cultural dimension. In any case, each of these three issues is treated separately, hence we can empirically assess to what extent class alignments on these issues differ.

The economic dimension of political conflict has been frequently conceived as capturing the antagonism between a pole favorable towards state intervention and redistribution, and a pole opposing state redistribution and intervention in the economy and favoring instead market-based solutions. However, recent research has indicated that the complexity of this dimension may have also increased and that economic conflict cannot be conceived as a single dimension but as a combination of different conflicts, such as the conflict over new social risk policies, social investment policies or even issues with a mixed economic and cultural content such as welfare chauvinistic policies (Bonoli, 2005, 2006; de Koster, Achterberg, & van der Waal, 2012; Derks, 2004; Svallfors, 2012; Taylor-Gooby, 2004). In these analyses, I focus exclusively on preferences over income redistribution.

Oesch's scheme assigns occupations to classes based on two dimensions, one vertical and one horizontal. The vertical dimension captures differences between occupations that are grounded in the level of marketable skills required in them, and hence in the kind of employment relationship established between the employee and the employing organization given the employees' assets (Oesch, 2006b). This kind of vertical class distinction—which compares to hierarchical classifications in other class schemes, for example Erikson and Goldthorpe's—has been frequently associated with preferences on economic issues. The horizontal dimension captures instead differences in the nature of the work done in different occupations and in the kind of daily experiences incumbents in these occupations face. Hence, there is no clear hierarchical or gradient structure to horizontal class divisions. As defined by Oesch, the work logic captures four different dimensions or characteristics of occupations: the setting of the work process, the relations of authority at the workplace, the primary orientation



of the job and the skills required and implemented in the execution of daily tasks. Vertical differences in marketable skills and horizontal divisions based on these characteristics should ground class differences in political preferences.

Before elaborating on the political divisions we expect to find between classes, we must acknowledge that there is an asymmetry in the extent to which work logic has been associated with political outcomes among middle-class employees and among workers. As Oesch (2006b) explicitly mentions, the work he draws on to identify horizontal divisions within the middle class (e.g. Kitschelt, 1994; Kriesi, 1989, 1998; Müller, 1999) was developed within political sociology with the intention of differentiating groups that varied in their political predispositions. Hence, there is more direct reference to political differences and their mechanisms when addressing divisions based on work logic among the middle classes. In comparison, this argument is not as developed for workers. However, the three work logics and their characteristics are identified for the whole occupational structure, not just the professional classes. It is possible that the implications of horizontal divisions among workers are different from those among middle-class professions, but we should consider the potential for divisiveness in both groups.

### ***Economic preferences***

Economic preferences over state intervention should, first, reflect the vertical distribution of economic advantage along the occupational structure. This means that, because of their more rewarding position in the class structure, professional and semi-professional classes should be less supportive of state intervention and redistribution than workers. The self-employed in the independent work logic, which are distinguished from all other classes by their ownership of capital, should be particularly opposed to redistributive policies, especially those at the top of the occupational structure: large employers and self-employed professionals.

Other than this vertical division, we also expect economic preferences to differ horizontally because of the different kind of experiences that individuals in different classes are subject to in their daily jobs. Among the middle classes, we expect managers to show greatest opposition to state intervention and redistribution. Managers are incentivized to run their organizations as efficiently as possible and to maximize income. They share the responsibility and the power of running an organization and, therefore, their position is closer to that of the owners of capital and their success depends on the success of the employing organization (Oesch, 2006b). Their work is precisely directed to coordination and control with the objective

of profit maximization. Moreover, it is possible to reach managerial positions from lower-grade positions by moving upwards in the career ladder (this is more difficult in other professional occupations where specific formal qualifications are a requirement for entrance into professional cadres) (Oesch, 2006b). This should reinforce values such as self-reliance. Because of these factors, we expect managers to be more market-oriented and less supportive of public intervention in the economy.

Within the middle classes, socio-cultural professionals should be the most distant to managers on the economic dimension. In their jobs, socio-cultural professionals must engage in symbolic interactions and negotiations with their clients on a similar level. Hence, these workers are outside the lines of command, and they also do not owe loyalty to the employment organization. This class contains more humanistic and value-laden occupations that are less dependent (or not at all dependent) on profit maximization. The work of these employees is not instrumental to economic goals but to attending to people's needs (Güveli, 2006). This draws their loyalty away from the employing organization and closer to their clients, patients, students, users (Oesch, 2006b). For this reason, we expect employees in this class to hold more egalitarian preferences and favor redistributive mechanisms. Technical professionals, on their part, should be located in a middle position between the managers and socio-cultural professionals. Their work and the type of expertise they implement is more instrumental to the functioning of organizations, and hence their jobs are more dependent on profit maximization (although not as directly so as in the case of managers) (Kriesi, 1989; Müller, 1999; Oesch, 2006b).

Among the low-skilled classes we also expect workers in the organizational work logic to be more favorable towards market solutions and less supportive of state intervention. As in the case of managers, the daily work of office clerks is more directly oriented to their employing organization. This should make them more loyal towards it and to its interests. Moreover, because of the clear bureaucratic structure in which they are embedded, which makes advancement up the career ladder possible, we also expect office clerks to be more self-reliant and reluctant of state intervention. Expectations on the differences in preferences between production and service workers are mixed. Because, as was the case with socio-cultural professionals, service workers are in more direct contact with the recipients of their work (attending to their needs and demands), we expect them to be more supportive of redistribution. At the same time, however, they work within flatter hierarchies and this might bring them in closer contact with higher-grade classes, which are less supportive of

redistribution. This closeness to upper-status jobs could decrease support for redistribution among these workers (Arndt & Rennwald, 2017). In a similar vein, production workers are located at the bottom of clear hierarchies and lines of command, which should facilitate a clearer outlook on one's relative position in the employment structure. This should promote preferences for redistribution and state intervention. For these reasons, we can hypothesize that, among workers, office clerks will be most opposed to redistribution, but the expectations about production and service workers are more mixed.

### ***Cultural preferences***

When it comes to class variation in cultural preferences, the literature has identified middle-class occupations to be more culturally libertarian than workers (especially in comparison to production workers) (Houtman et al., 2008). This has been mainly associated with differences in levels of education between these two groups. However, when assessing the preferences of classes in different work logics but with equal levels of marketable skills, any differences in preferences cannot be attributed to variation in levels of education because classes in the same vertical location are characterized by similar skill levels. Thus, also in this dimension of political conflict we expect that being employed in different work logics will exert an influence on political orientations.

Both for professionals and workers, we hypothesize that employees in the interpersonal service work logic will hold more culturally libertarian preferences than employees in other work logics. In their occupations, service workers and professionals are involved in frequent interaction with the recipients of their work, and hence, their jobs depend crucially on social skills. Their work entails attention to human individuality, and caring and attending to other people's needs. The orientation of the work is mostly towards other people and it frequently involves face-to-face interaction with them. We expect individuals in this work logic to be more tolerant and acceptant of others (also of those who deviate from one's norms), because they rely on social and cultural knowledge and skills to cater to individual demands and tastes (Esping-Andersen, 1993 in Oesch, 2006; Güveli, 2006). Moreover, work in the interpersonal work logic will frequently entail more opportunities to deal with cultural diversity (Kitschelt & Rehm, 2014), which should also favor more tolerant cultural preferences. Because professionals and workers in this logic also work largely outside the lines of command, we expect them to put less value on compliance and uniformity. Flatter hierarchies should also promote more frequent interpersonal relationships between people of different statuses. All

these traits that characterize the daily work and experiences of employees in the inter-personal service work logic should develop and reinforce the values and attitudes associated with more culturally libertarian positions.

Regarding the organizational work logic, we expect incumbents in these occupations to hold more culturally authoritarian positions. One of the characteristics of managerial occupations is that they involve loyalty towards the employing organization, and they are part of an authority structure that attributes managers the power to exercise control and coordination over the work of others. Thus, their work emphasizes and rewards compliance, whereas it avoids and punishes deviance. Professionals' jobs in other work logics, in contrast, are characterized by more autonomy. Korman (1975) indicated that individuals employed in organizations that promote self-control and autonomy have a more positive perception of diversity and ambiguity than employees in organizations stressing hierarchical control. For this reason, we expect managers to hold more culturally authoritarian preferences than technical and socio-cultural professionals. For clerical workers, however, the expectation is not so clear, since they are not in charge of exercising power and control. Moreover, in terms of embedment in a command structure we find that this is more salient for production workers' jobs than for office clerks'. In any case, because their work entails mainly clerical tasks, which deal mostly with objects or documents, and they work within a bureaucratic command structure we expect them to be relatively more culturally authoritarian than service workers, but probably also less so than production workers.

Within the technical work logic, we find that production workers have been frequently identified as a markedly authoritarian class (Arzheimer, 2013; Bornschier & Kriesi, 2013; Houtman et al., 2008). Production workers' jobs are embedded within clear-cut lines of command, where supervision is close, and there are limited opportunities for exercising autonomy and self-control in one's work. As typical occupations within a Fordist logic with a clear line of command and authority, low- and unskilled production jobs are characterized by a specialization and routinization of tasks. This kind of jobs where supervision is close, work autonomy is low, and daily tasks are routinized have been related to the development of fatalism and authoritarian attitudes (Kohn & Schooler, 1982). Mortimer and Lorence (1979) and Korman (1975) have indicated that this type of occupations are associated with lower tolerance of differences, hostility towards variation and challenge, and greater antagonism against those who are different. Lipset (1960) also maintained that the narrow routine characterizing these jobs limited the ability of workers' to understand and value the complexity

of different points of view. For these reasons, we expect production workers to be particularly authoritarian in their cultural preferences.

Professionals in the technical work logic, in comparison to managers, have substantially more autonomy in their jobs, their loyalty to the employing organization is lower, and they are not in charge of exercising control and authority over the work of others. For this reason, we expect them to be less culturally authoritarian than managers. However, they should display more authoritarian preferences than socio-cultural professionals. While technical professionals are not involved in the kind of face-to-face personal exchange or in the exercise of social expertise that socio-cultural professionals face in their daily work; they are also not bureaucratic employees, who depend on the order and compliance of lower-grade workers. Hence, we expect them to occupy a mid-position between the more culturally libertarian socio-cultural professionals, and the more authoritarian managers.

As I discuss in the Data and methods section, while there is only one item that captures economic preferences on the issue of redistribution, there are three different items that could be conceived as part of the cultural dimension of conflict: attitudes towards immigration, tolerance towards homosexuality and preferences over European integration. While the first two, which capture attitudes and values towards diversity and possible deviance of one's own norms are clearly related to the mechanisms underlying class differences reviewed above, this link is not as clear for the issue of European integration. This is so because, while European integration can be associated with cosmopolitanism, migration and nationalism, it also has an economic dimension to it. In fact, this issue has been sometimes treated as a separate dimension of conflict (Hooghe et al., 2002). This is why, we may find that horizontal differences between classes on this issue may deviate from the expectations stated above, which were elaborated in terms of specifically cultural attitudes and values.

Both the class-voting literature and occupational sociology have emphasized the difficulty of assessing whether the political differences between classes are a consequence of socialization into the occupation or work logic, or whether they are just the manifestation of earlier differences in attitudes and values that lead individuals to select into certain occupations. The studies in occupational sociology that have attempted to disentangle the effects of the two have found both socialization and selection to be plausible mechanisms behind value differences (e.g. Mortimer & Lorence, 1979). It is reasonable to expect that attitudes, skills and values will guide individuals in selecting a certain occupation, and these

will be further developed in the context of the workplace. In this chapter, and with the data at hand, I cannot separate selection from socialization effects. However, to test the robustness of results to possible selection I fit models with additional controls that attempt to account for it. In any case, later chapters based on longitudinal data provide further insights into the selection vs. socialization debate.

Most of the literature addressing class differences in preferences or behavior has mainly focused on explaining mean differences between classes, but has paid less (or no) attention to the variance of these preferences. Nevertheless, because of the characteristics of different occupational classes, we can expect incumbents in these classes to display different degrees of dispersion of preferences. Considering divisions based on work logic among workers, unskilled service occupations have been frequently characterized as being more diverse and as having more atomized jobs than traditional industrial low-skilled jobs. Greater heterogeneity in the tasks performed by service workers, together with the fact that many of these jobs are performed in workplaces of smaller size, could be less conducive to the formation of common and homogeneous preferences among them. Hence, service workers could show greater variance in their policy preferences than production workers. These differences in variance should appear both on the cultural and the economic issue dimensions. For other classes, it is more difficult to articulate expectations about the dispersion of preferences within a class. Thus, I will take a more explorative approach on this question for the remaining classes.

### **Data and methods**

To study differences in policy preferences between classes, in this chapter I conduct a series of regression analyses on pooled survey data from the European Social Survey (ESS) (rounds 1 to 6). The reasons for relying on this data are, first, that the ESS covers a large number of European countries that have undergone a process of economic modernization; secondly, that the ESS contains detailed occupational information (ISCO codes to the fourth digit) which allows me to operationalize Oesch's eight-class scheme; and thirdly, that this survey also includes a number of different policy issues that permit capturing preferences on more than a single conflict dimension. Because the occupational class scheme implemented disaggregates between eight different classes, it is necessary to pool the data from the different countries to increase the number of observations in each of the occupational categories and hence have more precise estimates of the association between policy preferences and class. These analyses rely, hence, on information pooled from 30 countries that were surveyed in the first six waves

of the ESS (not all countries are included in every wave).<sup>6</sup> Because some of the policy preference items studied refer specifically to attitudes towards immigration, and because later chapters analyze the association between class and electoral behavior, the sample only includes citizens of the country where the survey was fielded and respondents who are at least 18 years old (to have a sample comparable to the models studying voting).

### ***Operationalization of the main dependent and independent variables and controls***

The analyses consider different dependent variables that capture respondents' preferences on several issues. I rely on survey items that are included consistently across the different rounds of the ESS under consideration (with the exception of the item measuring preferences about EU integration which did not appear in rounds 1 and 5). Specifically, I study four different issues, and ideological self-placement. One of the issues concerns attitudes towards immigration. These are measured by means of an index constructed from six different items capturing preferences over immigration.<sup>7</sup> The values of the variable are predicted factors scores from a factor analysis of the six items, with lower values indicating that the individual opposes immigration and higher values that he is favorable towards immigration. Another variable measures preferences about whether the government should intervene to reduce income differences, which is operationalized through a direct question asking respondents about this issue. Higher values in this variable indicate that the respondent thinks that the government should redistribute less, while lower values indicate that the government should redistribute more. Another item captures respondents' attitudes towards homosexuality, which is also measured directly by an item in the survey. Higher values in the response scale indicate that the respondent thinks that gays and lesbians should be free to live life as they wish while lower values indicate opposition to this statement. Another item captures directly preferences over European integration. Lower values in this item mean that the respondent thinks that EU unification has already gone too far, while higher values indicate that unification should go further. Lastly, I also consider differences in self-placement on the left-right ideological scale. Although ideology does not capture preferences on a specific issue, it has often been considered as a measure that subsumes preferences on values and policies (Kitschelt & Rehm, 2015a; Medina, 2015). In all analyses the issue variables have been standardized to be

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<sup>6</sup> Non-European countries (i.e. Israel, Russia, Turkey and Ukraine) were excluded from the sample. Appendix 2.A presents details on the countries included in each wave of the ESS.

<sup>7</sup> A factor analysis of the six variables returns only one factor with an eigenvalue higher than 1 and shows that all variables load strongly on a single dimension. For the results of the factor analysis of the different survey items see Appendix 2.B.

able to compare results across different models, while the measure of ideology is kept in the original 0-10 scale. A detailed description of all variables, together with descriptive statistics are presented in Appendix 2.A.<sup>8</sup>

The key independent variable in these analyses is the division between workers according to occupational class. The operationalization of occupational classes follows Oesch's eight-class scheme, which was introduced in the previous chapter. Although the main focus in this chapter is on the differences between workers, I also consider differences among the middle classes, which will serve as a point of comparison for the relevance of horizontal divisions. When relying on information on respondents' employment one needs to decide which will be the sample studied. The ESS includes information on the current occupation for those individuals in paid work at the time of the survey, as well as information on previous occupation for those individuals outside the labor market at the time of the survey but who had previously been in paid work. In the analyses that follow I study the sample of respondents who have a job at the time of the survey or have had one before.<sup>9</sup> To account for the fact that some of the respondents were out of the labor market at the time of the interview I include a control variable that captures the labor market status of the individual at the time of the survey.

In this and all the chapters in the dissertation the unit of study is the individual and not the household. That is, individuals are assigned a class and a labor market status based on their own employment situation and not their partners' or the main wage earner's in the household. Two reasons guide this decision. First, because some of the classes under consideration are predominantly occupied by female employees (those in the inter-personal work logic) we would risk losing many of the observations in these classes if we imputed class location of the husband. Second, many of the mechanisms through which we expect class to have an impact on policy preferences and behavior operate through the daily experiences individuals are subject to in the context of their job. This will primarily occur for the individuals holding that job and being exposed to these experiences. For this reason, survey respondents are assigned a class based on the occupation they had at the time of the survey (or their last occupation in case they

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<sup>8</sup> They have been standardized by subtracting the sample mean and dividing by the sample standard deviation.

<sup>9</sup> The same analyses have been conducted for a smaller sample of only those respondents who had a job at the time of the interview and the results are virtually unchanged (results not shown).



are not employed), and all individuals who have never had a job are hence left out of the analyses.<sup>10</sup>

As it was discussed in the previous chapter, atypical forms of employment (in the form of involuntary part-time or fixed-term contracts) have received considerable attention because of their potential for grounding constituencies with distinct policy preferences. Because, atypical employment risk is not uniformly distributed along the occupational structure (Schwander, 2012), I control for atypical employment in the association between class and preferences. In all analyses based on ESS data I implement a restrictive operationalization of atypical employment: insiders are respondents employed by means of a permanent contract, while outsiders are those employed without a contract or with a temporary contract. I use this restrictive measure of labor-market outsidersness, which does not include part-time workers as outsiders, because the ESS does not allow to differentiate voluntary and involuntary part-time employment. These two employment situations are of different nature, and only the latter is considered a form of atypical employment (Burgoon & Dekker, 2010; Davidsson & Naczyk, 2009). Even if the measure implemented is a more restrictive form of defining outsiders, by excluding part-time employment which could be voluntary, we can be certain that this measure truly captures a weaker attachment to the labor market and a higher level of employment risk. In the dualization literature we sometimes find the unemployed treated as outsiders. I explicitly code the unemployed as a different group, and do not include them as part of the labor-market outsiders, because recent research has found that the employed and the unemployed clearly differ in their preferences and behavior (Marx & Picot, 2013). Atypical employment, unemployment, and being out of the labor market are operationalized as a single categorical variable with four response categories: one for those employed with a permanent contract (insiders), one for those with fixed-term or no contract (outsiders), one for the unemployed and one for respondents out of the labor market (whether retired, in family care, or in other situations).

Post-industrial economies can differ in terms of the configuration of their occupational structure, and the different countries under consideration also differ in many other characteristics like their institutional configuration, party systems, etc. To account for these differences in the regression models I include fixed effects for country-round combinations,

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<sup>10</sup> About 10 percent of respondents report that they have never had a job. These respondents are excluded from the analyses in this and later chapters of the dissertation.

which account for all those observed and unobserved factors that are country-round specific. For all dependent variables, the analyses are performed by fitting OLS regression models.

### ***The unconditional effect of class***

Because changes in the occupational structure did not occur in a vacuum but are instead related to other transformations such as the feminization of the labor force or labor-market dualization, we expect class location to be related to demographic factors and labor-market risks. It is important to consider these overlaps because this is how class location will be observed in the electorate, in combination with these other factors. Social classes appear as a bundle of different individual traits tied together. Although in this chapter, and in this dissertation, I attempt to disentangle the implications of class from those of age, gender or atypical employment, we must acknowledge that these different characteristics will often appear together in the population. If we want to address the consequences of class location for politics and to assess whether parties will take up classes' demands, we need to consider that political parties will address electoral constituencies in which these characteristics correlate. For this reason, in the next section I start by studying unconditional differences between classes. I attempt to capture the 'gross' effect of class (in contrast to its 'net' effect) by studying the association between class and preferences without introducing additional controls for other socio-demographic factors. I also provide some descriptive statistics of how class correlates with other measures in the sample under consideration to better understand what this unconditional effect captures. Although in additional models I introduce further controls, this initial account of the 'crude' effect of class provides some insight into which are the overall average differences in preferences between individuals located in different classes.

Besides estimating the 'unconditional' effect of class, in this chapter (and in the rest of the dissertation) I generally avoid including 'artificial' or post-treatment (bad) controls when assessing the impact of class (Angrist & Pischke, 2009). For example, I do not introduce controls for earnings because it is artificial to estimate the impact of class 'net' of factors that are actually outcomes of class location. Because economic classes are conceived, by definition, as a measure that captures differences in life chances and economic opportunities, it is contradictory to hypothesize an effect of class net of these implications for life chances. Although educational achievement is not a 'post-treatment' characteristic, I also exclude this variable from some of the models because it appears as an 'artificial' control since it directly contributes to the operationalization of class location. It is particularly difficult to conceive vertical differentiation

between classes that is unrelated to educational attainment. In fact, Oesch's vertical dimension is partly based on differences in education. However, because educational achievement could also affect horizontal comparisons between classes (especially because the simplified eight-class scheme omits some of the vertical variation), I conduct the analyses both with and without a control for education. In any case, throughout the dissertation, I approach the analysis of the impact of class by deliberately including minimal controls that avoid controlling for post-treatment factors and other characteristics that are part of the definition of class. However, I also fit models with further controls that test the robustness of simpler specifications.

## **Results**

### ***Distribution of social class, labor market vulnerability and demographics***

Earlier research has indicated that social class might be associated with atypical employment or with demographic factors. For this reason, before assessing the relationship between class and issue preferences, I start by considering how these different measures of employment risk and demographic characteristics overlap in the sample. This can have implications for the absolute differences in preferences between classes and also for the variance within them. By looking at how these variables overlap in the sample under study we will have a clearer idea of who are the 'typical' occupants of each of the classes when we consider the unconditional effect of class.

Table 2.1 (based pooled data from 30 countries and six rounds of the ESS) reveals that, while unemployment risks appear associated with the vertical dimension of the occupational structure, this is not the case for atypical employment which is more closely related to the horizontal dimension. Among the employees, the unemployment rates of professional and semi-professional employees are lower than those of low-skilled workers (among the latter, production workers display the highest unemployment rate, 8.4 percent). Professional employees in all three work logics are less likely to be unemployed than workers in either of the work logics. Comparatively, the prevalence of atypical employment does not differ so much vertically, but rather seems to affect particularly respondents in the inter-personal service work logic (whether they are professionals or low-skilled workers). In fact, the proportion of outsiders among socio-cultural professionals is marginally higher (11.0 percent) than among production workers (9.0 percent) and office clerks (8.6 percent). The highest proportion of outsiders is concentrated among service workers (12.3 percent). Because the extent of two-tiered labor-market deregulation varies across different countries, table 1 in Appendix 2.C

shows the association between occupational class and labor-market risks for four groups of countries. This table indicates that, although the highest proportion of fixed-term contracts and the highest unemployment rates appear in Anglo-Saxon and Southern European countries, the pattern of atypical employment being mostly associated with horizontal divisions in the occupational structure and particularly affecting employees in the inter-personal service work logic is consistent across regions.

**Table 2.1: Distribution of labor market status (including atypical employment and unemployment) across occupational classes<sup>11</sup>**

Occupational class	Out of the labor				Total
	Insider	Outsider	market	Unemployed	
Large employers	77.3 (3,720)	1.4 (67)	19.7 (948)	1.6 (79)	100.0 (4,814)
Small business owners	62.2 (15,444)	4.3 (1,067)	31.2 (7,757)	2.3 (573)	100.0 (24,841)
Technical professionals	61.2 (8,343)	7.2 (984)	28.3 (3,864)	3.3 (450)	100.0 (13,641)
Production workers	37.5 (20,503)	9.0 (4,893)	45.1 (24,636)	8.4 (4,600)	100.0 (54,632)
Managers	59.8 (18,076)	7.1 (2,137)	30.4 (9,190)	2.8 (841)	100.0 (30,244)
Clerks	47.4 (11,088)	8.6 (2,009)	39.4 (9,228)	4.6 (1,076)	100.0 (23,401)
Socio-cultural professionals	58.1 (14,567)	11.0 (2,746)	28.8 (7,221)	2.1 (519)	100.0 (25,053)
Service workers	40.8 (19,260)	12.3 (5,799)	40.1 (18,915)	6.8 (3,198)	100.0 (47,172)
Total	49.6 (111,001)	8.8 (19,702)	36.5 (81,759)	5.1 (11,336)	100.0 (223,798)

*Note:* The table here shows row percentages of labor market status for each class and the number of observations in brackets.

Numerous studies have also pointed to an association between demographic characteristics and occupational class. Because tertiarization of the economy coincided with the incorporation of women in the labor market, the composition of the occupational structure and the distribution of labor-market risks is strongly gendered (Schwander, 2012). These findings are replicated in the sample under study, as shown in table 2.2. Women are strongly overrepresented in the inter-personal service sector—they represent 74.3 percent of socio-cultural professionals and 72.1 percent of service workers—and among office clerks (73.9 percent). In the overall sample the managerial professional class is approximately balanced in terms of gender, and women are clearly underrepresented in the technical work logic and

<sup>11</sup> To simplify the presentation of the results in the figures and tables I simplify the designation of each of the classes. Large employers refers to the class composed by both large employers and self-employed professionals.

among the self-employed. Studying groups of countries separately (table 2 in Appendix 2.C), indicates that the distribution of gender in the service occupations is similar across different regions. Larger regional differences appear in the gender composition of the production workers class. Overall, this is clearly a male class, but the imbalance is strongest in the Nordic countries, and progressively less strong in Continental European, Anglo-Saxon and Southern European, and Eastern European countries.

**Table 2.2: Percentage of women across occupational classes**

Occupational class	Percentage of women	Total individuals
Large employers	33.6	4,809
Small business owners	39.9	24,823
Technical professionals	25.8	13,630
Production workers	31.2	54,592
Managers	50.8	30,218
Clerks	73.9	23,380
Socio-cultural professionals	74.3	25,030
Service workers	72.1	47,135
Total	52.5	223,617

*Note:* The table here shows row percentages of women for each class and the total number of individuals (both men and women) in the sample.

The post-industrialization of the occupational structure also carries a clear generational component. This is manifest in the overall distribution of age among classes displayed in table 2.3. Production workers are amongst the oldest classes, whereas low-skilled service workers are the youngest class. Office clerks display a slightly lower-than-average mean age. A separate analysis by groups of countries (table 4 in Appendix 2.C) indicates that the composition in terms of age is roughly comparable across the different regions, and that workers in the interpersonal service logic appear, on average, younger than other workers, while production workers (together with small-business owners and large employers) are consistently among the oldest classes.

**Table 2.3: Descriptive statistics of age by occupational class**

	Age of respondent	
	Mean age	Std. Dev.
Large employers	50.95	14.89
Small business owners	52.66	16.63
Technical professionals	47.43	16.28
Production workers	50.85	18.32
Managers	49.22	15.97
Clerks	48.41	17.53
Socio-cultural professionals	48.32	15.92
Service workers	46.87	18.51
Total	49.25	17.44

*Note:* The table here shows the sample mean and standard deviation of age in each class.

Clearly, post-industrialization has entailed changes in the occupational structure that are not neutral to other demographic factors such as gender or age, and neither are class and atypical employment independently distributed. Even though the main concern in this chapter is to isolate the association between occupational class and policy preferences, this association must be understood in a context where these characteristics of individuals' employment situation overlap and are intrinsically related to specific demographic profiles.

### ***Policy preferences and ideological self-placement***

#### ***Unconditional effects of class***

The regression models in table 2.4 start by presenting the differences in issue preferences between occupational classes including only country-year fixed-effects as controls. First of all, we need to remark that there are clear differences in how occupational classes are located on all issues under consideration. This would, at first, argue against the dealignment thesis and its proposition that, in deindustrialized societies, classes do not differ politically. Moreover, we should also emphasize that the largest class differences appear to be along the vertical class division. Since production workers are set as the reference category (hence all coefficients indicate deviations from production workers' average preferences), we observe that the largest coefficients are usually associated with one of the four higher-grade classes. That is, it is usually one of the professional and semi-professional classes that is located at the opposite pole from production workers. On the different dimensions, we find that some of the expectations I articulated in terms of class differences are confirmed, while others are not.

First, and focusing on workers, we had mixed expectations about whether service and production workers would differ in terms of their positioning towards redistribution. While service workers could be more favorable to redistributive mechanisms because of the social content of their work, production workers' location at the bottom of a clear command structure might increase the visibility of their relative worse-off employment situation. In fact, we observe that these two classes are rather similar in terms of economic preferences, with service workers being marginally more opposed to economic redistribution. For office clerks, we observe that, as expected, they display greater opposition to redistributive mechanisms than production and service workers (on average 0.103 standard deviations more opposed than the former). Horizontal differences on this issue are especially noticeable among the professional classes, where socio-cultural professionals appear more favorable to redistribution than technical professionals and managers—which display relatively similar preferences. Moreover,

the difference between socio-cultural professionals and production workers on this issue is comparable to the one between office clerks and production workers, which emphasizes the pro-redistributive preferences of this group of professionals. As we would expect, self-employed respondents are most opposed to redistribution when compared with other classes of similar marketable skills level. In fact, small business owners appear less supportive of redistribution than socio-cultural professionals.

**Table 2.4: Regression analyses of issue preferences and ideology on class only**

	(1) Opposed to redistribution	(2) Favorable to immigration	(3) Tolerant to homosexuality	(4) Favorable to EU integration	(5) Ideology
Occupational class (Ref.category: Production workers)					
Large employers	0.590*** (0.014)	0.580*** (0.014)	0.292*** (0.013)	0.324*** (0.018)	0.613*** (0.033)
Small business owners	0.251*** (0.007)	0.159*** (0.007)	0.041*** (0.007)	0.058*** (0.009)	0.643*** (0.018)
Technical professionals	0.354*** (0.009)	0.413*** (0.009)	0.222*** (0.008)	0.198*** (0.011)	0.196*** (0.022)
Managers	0.364*** (0.007)	0.432*** (0.007)	0.255*** (0.006)	0.230*** (0.009)	0.357*** (0.016)
Clerks	0.103*** (0.008)	0.240*** (0.007)	0.236*** (0.007)	0.111*** (0.009)	0.182*** (0.018)
Socio-cultural professionals	0.145*** (0.007)	0.588*** (0.007)	0.323*** (0.007)	0.241*** (0.009)	-0.153*** (0.017)
Service workers	0.014* (0.006)	0.108*** (0.006)	0.172*** (0.006)	0.044*** (0.008)	0.026+ (0.015)
Constant	0.024 (0.022)	-0.297*** (0.023)	0.044* (0.020)	-0.382*** (0.023)	4.514*** (0.053)
Country-round FE	✓	✓	✓	✓	✓
Observations	220,262	198,502	215,512	139,709	197,675
R-squared	0.121	0.175	0.180	0.094	0.041

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

Note: All outcome variables, except for ideology, have been standardized, higher values indicate opposition to redistribution, more favorable attitudes towards immigration, more tolerant attitudes towards homosexuals, more favorable attitudes to EU integration, and more right-wing ideological placement. Ideology is kept in the original 0-10 scale.

Moving to cultural issues, which are measured through attitudes towards immigration and tolerance towards homosexuality, we find that the horizontal dimension accounts for larger differences among workers. Service workers are on average 0.108 standard deviations (in the dependent variable) more supportive of immigration than production workers. They also display more tolerant attitudes towards homosexuality (a difference of 0.172 standard deviations). This is in line with the expectations formulated based on the differences in the daily experiences of workers in the production and service sector. Contrary to our expectation,

though, we find that office clerks are more culturally libertarian than service workers. Moreover, on the issue of tolerance towards homosexuality this group displays preferences close to the professional groups of managers and technical professionals, which we expect to be more culturally libertarian. Interestingly, small business owners do not show as strong opposition to immigration as production workers, but they are almost as intolerant towards homosexuality as these workers. Comparing the horizontal differences among low-skilled workers to those found among professionals, we observe that on these issues they are of comparable magnitude. Again, socio-cultural professionals appear as the group that deviates most from the other middle classes (by displaying more culturally libertarian preferences). For these issues, the difference between socio-cultural professionals and other professional classes are comparable to the ones found between office clerks, production and service workers.

Lastly, on preferences over EU integration the difference between production and service workers is small (although statistically significant). Also on this issue we find that, against our expectation, office clerks appear more culturally libertarian. However, as mentioned above, it is unclear whether this item is only capturing cultural preferences. In comparison to other issues, differences based on the horizontal dimension are smaller, also among the professional classes. Among the higher-grade classes large employers and self-employed professionals are the most supportive of EU integration. This pattern is not repeated for lower-grade self-employed, the small business owners, who appear only slightly more favorable to EU integration than service workers.

Lastly, model 5 in table 2.4 presents differences in self-placement on the ideological scale. The ideological left-right dimension has been sometimes conceived as subsuming different dimensions of political conflict, although there is disagreement on whether it mainly captures the economic dimension of conflict or whether it has also come to encompass some of the cultural issues (Inglehart & Klingemann, 1976; Kitschelt & Rehm, 2015a; Middendorp, 1992; Vries, Hakhverdian, & Lancee, 2013). As was the case with the issue of redistribution, production and service workers show great similarity in their ideological self-placement. Service workers will tend to position themselves marginally more towards the right (as we also saw in the economic issue), but in this case the difference is only statistically significant at the 0.10 level. The difference with office clerks is larger, as they are positioned on average 0.182 points to the right of production workers. What stands out from this analysis is that socio-cultural professionals appear as the most left-leaning class, positioned on average 0.153 points to the left of production workers. Moreover, the difference with the other middle classes is



considerable, they are more than half a point on the scale to the left of managers, and 0.349 points away from technical professionals. The self-employed (both large employers and small business owners) are substantially more ideologically right-wing than all other classes.

It is interesting to find such similarities between service and production workers on economic issues and ideological self-placement, especially because these two groups do not just differ in the logic of their work but also in their socio-demographic composition. In contrast, we find that differences in preferences between these classes are larger on cultural issues. On the cultural dimension, the differences found among low-skilled classes are of similar magnitude to the horizontal differences found among the middle-class groups. In the case of preferences over redistribution and ideology, we find greater heterogeneity for the middle class than for workers. Moreover, this heterogeneity is especially driven by the position of socio-cultural professionals who are markedly more pro-redistribution and left-wing than other professional classes.

#### ***Impact of occupational class conditional on labor-market status, socio-demographic controls and trade union membership***

Since occupational class, labor market risks, and demographic characteristics are not independently distributed, the models in table 2.5 regress the different policy preference issues and ideology on occupational class, labor market status, age and gender simultaneously. Moreover, these estimations include an additional control variable that measures if the respondent is a member of a trade union. Traditionally, unionization has played a major role in accounting for the political organization and mobilization of the working class. Unions play a relevant role in the formation of the preferences of workers, since they can provide information and promote expressions that may in part contradict and counteract the spontaneous experiences of the work life (Arndt & Rennwald, 2017; Kitschelt, 2013). Because trade union membership is more commonly found in certain occupations, especially those in the traditional working class milieu (Rennwald, 2013), some of the differences we perceive between workers may be a consequence of compositional effects grounded in unionization. For this reason, I introduce it as a control in these models.<sup>12</sup>

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<sup>12</sup> Other forms of network embedment, besides trade union membership, can affect policy preferences. I have conducted the analyses reported above including as additional controls religious affiliation and other forms of network embedment (whether the respondent is a member of a political party, or declares to feel close to any political party) but the coefficients for the different occupational classes are robust to alternative specifications including controls for levels of organization of workers (results not shown).

**Table 2.5: Regression analyses of issue preferences and ideology by occupational class (with controls)**

	(6)	(7)	(8)	(9)	(10)
	Opposed to redistribution	Favorable to immigration	Tolerant to homosexuality	Favorable to EU integration	Ideology
Occupational class (Ref. category: Production workers)					
Large employers	0.560*** (0.015)	0.579*** (0.014)	0.273*** (0.013)	0.335*** (0.018)	0.550*** (0.034)
Small business owners	0.238*** (0.008)	0.177*** (0.008)	0.040*** (0.007)	0.072*** (0.010)	0.579*** (0.018)
Technical professionals	0.326*** (0.009)	0.380*** (0.009)	0.179*** (0.008)	0.193*** (0.011)	0.198*** (0.022)
Managers	0.369*** (0.007)	0.430*** (0.007)	0.201*** (0.006)	0.247*** (0.009)	0.366*** (0.017)
Clerks	0.142*** (0.008)	0.253*** (0.008)	0.150*** (0.007)	0.142*** (0.010)	0.226*** (0.019)
Socio-cultural professionals	0.192*** (0.008)	0.587*** (0.008)	0.221*** (0.007)	0.277*** (0.010)	-0.074*** (0.018)
Service workers	0.042*** (0.006)	0.109*** (0.006)	0.074*** (0.006)	0.064*** (0.008)	0.069*** (0.016)
Labor market status (Ref. category: Insiders)					
Outsider	-0.058*** (0.008)	-0.009 (0.008)	-0.015* (0.007)	-0.005 (0.009)	-0.052** (0.019)
Outside the labor market	-0.068*** (0.006)	-0.045*** (0.005)	-0.083*** (0.005)	0.019** (0.007)	-0.061*** (0.013)
Unemployed	-0.189*** (0.010)	-0.116*** (0.010)	-0.019* (0.009)	-0.060*** (0.012)	-0.284*** (0.024)
Trade Union Member	-0.112*** (0.006)	0.061*** (0.006)	0.044*** (0.005)	-0.011 (0.007)	-0.347*** (0.014)
Male	0.124*** (0.004)	0.067*** (0.004)	-0.137*** (0.004)	0.078*** (0.006)	0.107*** (0.011)
Age	-0.004*** (0.000)	-0.007*** (0.000)	-0.010*** (0.000)	-0.003*** (0.000)	0.003*** (0.000)
Constant	0.122*** (0.023)	-0.134*** (0.024)	0.471*** (0.021)	-0.360*** (0.025)	4.482*** (0.055)
Country-round FE	✓	✓	✓	✓	✓
Observations	216,130	194,926	211,425	137,123	194,259
R-squared	0.133	0.195	0.225	0.098	0.046

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

Focusing on the issue of economic redistribution, model 6 in table 2.5 indicates that there are marginally larger differences between office clerks and service workers with respect to production workers once we introduce the control for labor-market risks, trade union membership and demographic factors. Nevertheless, the difference between production and service workers is still small (service workers are 0.042 standard deviations in the response scale less supportive of redistribution than production workers). For office clerks, the distance to production workers increases only marginally from 0.103 to 0.143 in this new specification.

Differences in preferences between production workers and the higher-grade classes are also not greatly affected by this specification. Socio-cultural professionals still stand out as holding substantially more pro-redistributive preferences than technical professionals and managers. A similar pattern is found in Model 9, which regresses preferences towards European integration on class. Namely, office clerks and service workers appear more distant from production workers after introducing these controls, but the changes with respect to Model 4 in table 2.4 are substantially minor. On European integration, horizontal differences between the professional classes are also hardly affected by the addition of control variables.

The differences in attitudes towards immigration among lower-grade workers are also barely affected by introducing these controls, the coefficient for service workers is nearly unchanged, and for office clerks it only increases marginally. In this specification, we still find that, against our expectations, office clerks appear more favorable towards immigration (and, hence, more culturally libertarian) than service workers. Moreover, the difference between service workers and office clerks is marginally larger than the difference between service and production workers. As I mentioned above, this may be partly due to differential educational composition of these two groups (since the simplified eight-class scheme aggregates groups of different marketable skill level within the same work logic). For this reason, I assess below whether this unexpected finding is replicated when additionally controlling for educational attainment.

On the issue of tolerance towards homosexuality is where we find the largest changes with the new specification. The differences with respect to production workers are reduced for all classes, especially for service workers and office clerks. In fact, with respect to model 3 in table 2.4, the difference between service and production workers is more than halved in model 8. After introducing the controls, in comparison to other classes, production workers appear relatively less intolerant to homosexuality than in the unconditional model. This might be explained by differences in the age and gender composition between the different classes, since production workers are mostly male and among the oldest classes and these two characteristics have been associated with more intolerant attitudes towards homosexuals and minorities. Also in this case, the horizontal differences among the higher-grade classes are substantially reduced. Socio-cultural professionals appear much closer to managers and technical professionals in their attitudes towards homosexuality after having introduced these controls.

Lastly, on the issue of ideological placement the differences in ideology between office clerks, production and service workers increase in model 10. Although still small (0.069 points on the 11-point ideological scale) the difference between service and production workers is significant at the 0.001 level. For office clerks, it is noticeable to find that horizontal differences with respect to production workers are larger than distances to some of the professional classes. Whereas office clerks appeared as marginally more left-wing than most higher-grade classes when assessing unconditional class differences, they are located marginally to the right of technical professionals in this specification. It is also interesting to note that, after having introduced these controls, socio-cultural professionals are still more left-leaning than production workers, but markedly less so than when we considered unconditional class differences. The ideological distance between these two groups is more than halved after the controls are introduced. In any case, socio-cultural professionals still appear as markedly more left-wing than the other higher-grade classes.

According to Esping-Andersen (1993, 1999) the relative size and composition of the low-skilled service sector may differ across countries depending on how national regulation and welfare institutions shape the outcome of Baumol's model of unbalanced growth (see chapter 1). For this reason, after having considered how production and service workers differ in terms of issue preferences in the pooled sample of countries included in the ESS I run the same analyses separately by clusters of countries (results not shown).<sup>13</sup> These separate analyses indicate that the similarities in production and service workers' preferences are consistent across countries following different patterns of employment growth. Although the estimated differences between production and service workers in separate regions differ from those estimated in the pooled sample, these deviations are rather minor. Moreover, across the different dependent variables analyzed, there is no apparent pattern indicating that production and service workers are consistently more similar in one specific group of countries. The only visible trend is that production and service workers tend to hold more similar preferences in Eastern European countries. Larger differences across country clusters are only apparent in the case of ideology. This, however, is probably not related to patterns of employment growth but rather to differences in what the ideological dimension captures across different contexts (Middendorp, 1992; Vries et al., 2013). Since the results are relatively stable across clusters of

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<sup>13</sup> Countries are grouped by expected pattern of employment growth, separating Nordic, Continental European, Eastern European, and Anglo-Saxon and Southern European countries.

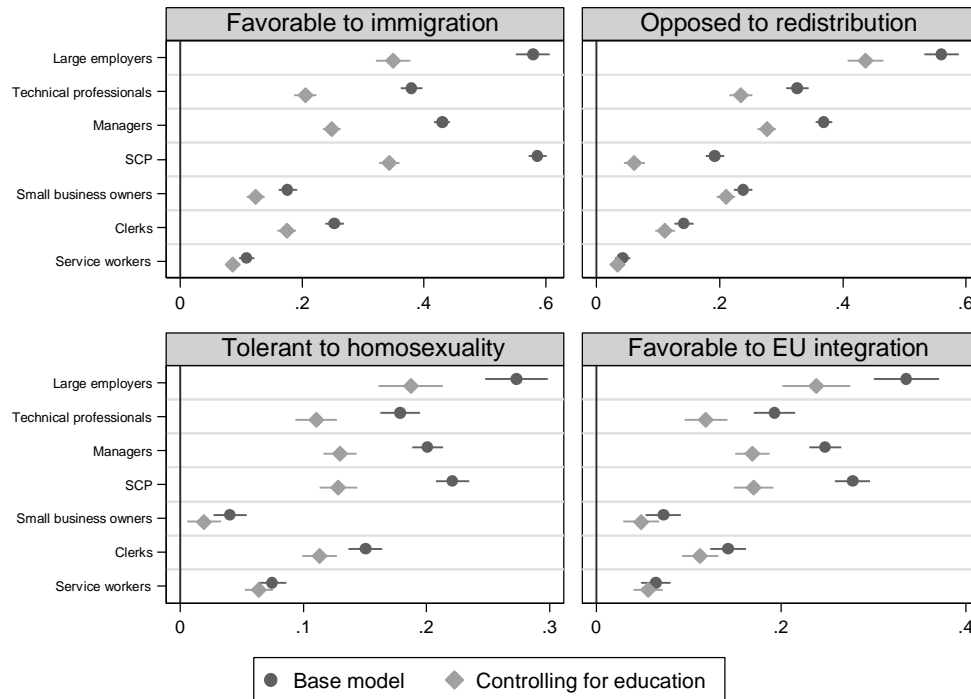
countries, the analyses in the following chapters focus on overall differences between classes estimated on pooled samples from different countries.

In sum, focusing on workers, we observe that the differences between production and service workers are rather small, especially with regards to preferences about redistribution and ideological placement. Among all occupational classes, service workers are the most similar to production workers, except for the issue of tolerance towards homosexuality where the differences between small business owners and the latter are smaller. Office clerks, however, tend to show larger differences from the other lower-grade classes, being frequently closer to some of the higher-grade classes than to workers. For both service workers and office clerks, whenever either of these two occupational classes differs from production workers it is because their position is closer to that of the middle classes. That is, they are economically more towards the right and culturally towards libertarian positions, while production workers are consistently located on the pro-redistributive but authoritarian pole.

When accounting for new patterns of social stratification in post-industrial societies it has been oftentimes suggested that hierarchy could play a smaller role in post-industrial or inter-personal service occupations (in contrast to industrial occupations), because service occupations are frequently embedded in flatter hierarchies, outside clear lines of command (Esping-Andersen, 1993; Oesch, 2006b). This would suggest that differences between higher- and lower-grade classes should be smaller in inter-personal service occupations where hierarchy is less salient. This is, however, not reflected in the analyses at hand, since differences between service workers and socio-cultural professionals are relatively smaller than other vertical class differences only on one of the issues—the desired level of income redistribution. The lowest vertical differences within a specific work logic appear for the organizational logic because office clerks are closest to the higher-grade classes. This could be due to office clerks interacting more frequently with colleagues and supervisors of different status. As argued by Arndt and Rennwald (2017), workers that are in closer contact to management and employers may be less likely to develop antagonistic attitudes, and develop values closer to those of higher-status co-workers. This could also be related to differences in educational achievement between classes.

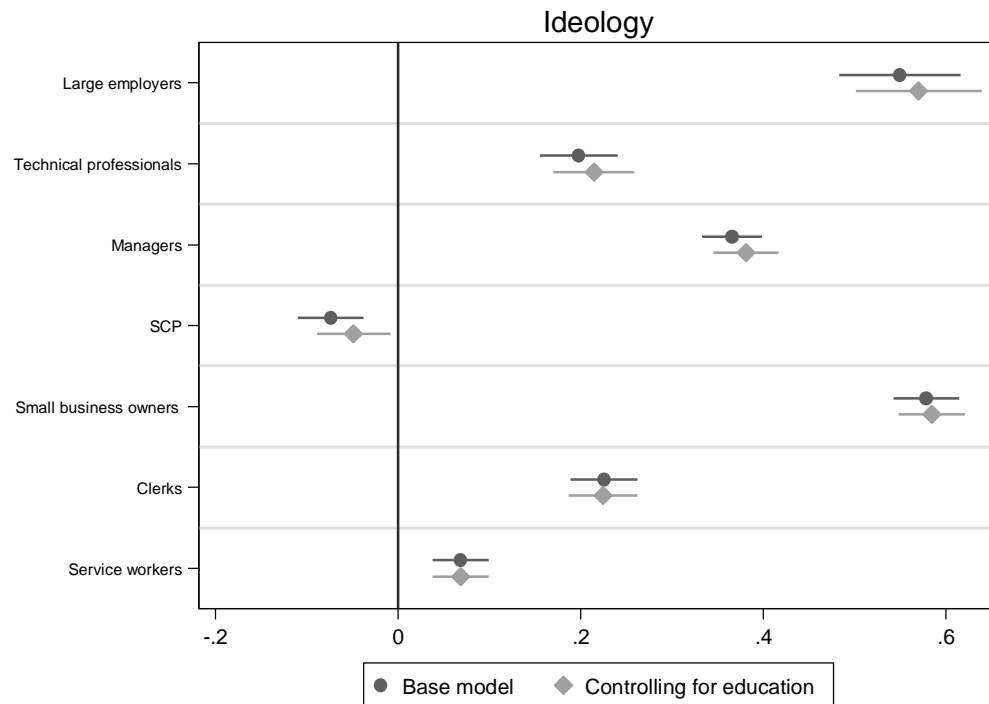
Recent literature on the impact of globalization on political conflict has suggested that preferences on cultural issues are mainly driven by educational attainment (Hainmueller & Hiscox, 2006a; Ivarsflaten & Stubager, 2013; Stubager, 2008). There might be a 'liberalizing

**Figure 2.1: Association between class and issue preferences with and without controlling for education**



effect' of education which, in what concerns us, could account for differences between production workers and office clerks if there is a disparity in the educational composition of these two groups. In principle, we should not find substantial changes to the differences between classes of similar marketable skills level, because Oesch's vertical dimension is closely associated with education and skill levels. However, there could be some variation in the educational composition of different classes stemming from the implementation of the simplified scheme. Figures 2.1 and 2.2 present a comparison of the coefficients corresponding to each of the occupational classes as estimated in the regression model presented in table 2.5 (including controls) and a model additionally controlling for education (Appendix 2.A presents the operationalization of the education variable). As in earlier models, the coefficients for occupational classes indicate differences with respect to the reference category: production workers.

**Figure 2.2: Association between class and ideology with and without controlling for education**



The first thing to be noted from figures 2.1 and 2.2 is that none of the directions of the associations between occupational class and the dependent variables of interest are reversed when controlling for education. However, we do find that the size of some of the coefficients is considerably reduced. Logically, this is mostly the case for the higher-grade classes, which differ most in terms of education from production workers. Nevertheless, horizontal differences between occupational classes within the same hierarchical level remain similar after introducing the educational control. Controlling for education only marginally reduces the size of the coefficients for the service workers class, and although the coefficients for office clerks are affected to a larger extent, the difference between office clerks and production workers is still statistically significant. Furthermore, the comparison between office clerks and other lower-grade workers still reveals that this group is more culturally libertarian than service workers. Moreover, we still observe that horizontal differences among higher-grade classes are comparable in size to the differences we find among lower-grade classes. Only on the issue of income redistribution we find that there are greater horizontal differences among professionals than among workers, and this is due to the distinctly pro-redistributive position

of socio-cultural professionals. These professionals are almost as supportive of redistribution as production and service workers once we control for education, which indicates that their support for redistribution exceeds what we would expect giving their higher level of marketable skills. Interestingly, figure 2.2 indicates that the coefficients referring to the association between occupational classes and ideology are virtually left unchanged by the introduction of the educational control.

Other than assessing whether class differences in preferences are affected by introducing a control for education, we might also want to consider how the association between class and preferences compares to the association between educational attainment and preferences. Recent literature has argued that level of educational attainment is a stronger driver of political preferences than other occupation-related factors, and this has especially been addressed in analyses of cultural preferences (Hainmueller & Hiscox, 2006b; Hainmueller, Hiscox, & Margalit, 2015; Ivarsflaten & Stubager, 2013; Stubager, 2008). Introducing educational attainment and occupational class as explanatory variables when modelling preferences over policy issues might appear artificial because it is difficult to conceive of an effect of social class net of levels of educational attainment. Because level of education is closely associated to the vertical dimension of marketable skills in the class structure, it might be difficult to picture a comparison, e.g., between technical professionals and production workers net of education. Education is presumably a relevant predecessor in explaining why some individuals are located in a professional (or semi-professional class) while others hold a low- or unskilled occupation.

Irrespective of whether one might consider this comparison artificial or not, it is possible to compare the differences in preferences based on class location and those based on educational attainment. The table in Appendix 2.F summarizes the models on which the coefficients on figures 2.1 and 2.2 were estimated. If we compare differences based on education and those based on class, we find that for some of the issues included in the cultural dimension, and especially on the issue of immigration, differences between educational groups can be larger than class differences if we compare groups (or classes) at the extremes. To illustrate this with an example, individuals who have completed tertiary education are, on average, 0.482 points more supportive of immigration than respondents that have not completed lower secondary education. This difference in preferences is larger than the one we observe between production workers and self-employed professionals and large employers, or between production workers and socio-cultural professionals. On the issue of tolerance



towards homosexuality we find that the variation in preferences based on education is marginally larger than the variation based on class (although the difference is smaller than in the case of immigration). On the issue of redistribution and on ideological self-placement differences based on education are considerably smaller than those based on class.

Focusing more specifically on the comparison among low- and unskilled workers, we find that the difference between production and service workers in their preferences over immigration is marginally larger than the difference between a respondent who has not finished lower secondary education and a respondent that has completed it. If, instead, we compare someone who has not finished lower secondary education to someone who has finished upper secondary education then differences in preferences (0.2 points) are larger than the difference between production and service workers (0.086 points), or production workers and office clerks (0.175 points). On the issue of immigration, again, although production workers are overall less supportive of immigration than service workers, if we compare a production worker who has completed upper secondary education to a service worker who has only finished lower secondary education we find that, in this case, production workers are marginally more liberal in their preferences. Taking into consideration the role of education does not alter our conclusions about the similarity between production and service workers, or of the general association between class and preferences, but it shows that differences in education between respondents can mitigate or exacerbate differences based on class.

### ***Robustness checks (additional controls)***

Models 1 to 5 in table 1 in Appendix 2.D further test to what extent the divisions found between occupational classes (especially the horizontal differences) could be driven by differences in income. These analyses come with a caveat, namely, that income can be considered a mediator in the relationship between class and preferences. Nevertheless, it is meaningful to address whether some of the diversity in preferences we find horizontally between classes are actually a consequence of differences in earnings between occupations. If this were the case, this means that these are not horizontal differences based on work logic, but rather vertical differences based on disparate market positions between occupations. To test for this, I introduce income as a control variable in the regression models on issue preferences

and ideology.<sup>14</sup> The limitation with these analyses is that the only available measure of income reflects the income of the household and not of the respondent.

When assessing differences in preferences towards redistribution the result of including a control for household income is roughly equivalent to including a control for education. For the issues of attitudes towards immigration, tolerance towards homosexuality and preferences over EU integration the results of the models controlling for income are comparable to those in table 2.5. Since these items capture essentially the cultural dimension of political conflict it is unsurprising to find that differences on these items are unaffected by controlling for income. This increases the confidence that horizontal divisions between work logics are actually capturing diversity in work experiences and not in class outcomes. Lastly, for ideology, introducing the control for income is also roughly comparable to controlling for education (although some of the differences between occupational classes are reduced slightly more in this new specification).

When assessing the impact of class on policy preferences, one can question whether preferences are affected by the actual work experiences and work context, or whether we are instead capturing differences in other characteristics that are conducive to selection into specific occupations and which are simultaneously related to issue preferences. For this reason, I test the robustness of the results by introducing additional variables that could account for selection into the occupation. Educational attainment can already be considered as one of such variables. Another possibility that I further test is to control for parental level of education in all models.<sup>15</sup> Parental education serves as an indicator of social class of origin which could guide the educational and occupational trajectory of their offspring.<sup>16</sup>

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<sup>14</sup> Controlling for household income in the dataset pooling all six ESS waves introduces certain difficulties, since income has been measured differently in the first three and last three rounds of the ESS. In table 1 in Appendix 2.D the variable household income is introduced as one common continuous control variable for all rounds of the ESS. I additionally specify two alternative models in which I separate the analyses for rounds 1 to 3 and 4 to 6, since within these groups of waves the measure of income is comparable. The results are stable across the different specifications for all the dependent variables under consideration (results not shown).

<sup>15</sup> Parental level of education is operationalized as the highest level of education completed by the father (as indicated by the respondent), and when information of the father is missing information on the mother's level of education is used instead.

<sup>16</sup> An alternative approach would be to introduce a control for parental occupation when respondent was sixteen in the models. The response categories for this variable, however, were changed after round 3 of the ESS and their categories are not comparable. Specifying the models for rounds 1 to 3, and 4 to 6 with the respective parental occupation variables does not substantially alter the results. Moreover, using ISEI

Introducing the control for parental education, and comparing the results of this model (included in table 2 in Appendix 2.D) to the model in table 2.5, indicates that there are no substantial changes in the class differences estimated. Although differences to production workers are slightly reduced, the change is smaller than when introducing the control for educational attainment. These findings are replicated for all issue preferences and for ideology. This shows that the differences found between classes are not affected by including a proxy for parental background which could partly account for selection into the occupation. If anything, the impact of parental background goes through respondents' level of education, which plays a larger role in the association between class and preferences.

### ***Differences in the dispersion of preferences***

So far, the analyses have concentrated on assessing differences in mean preferences between classes. These analyses have, however, overlooked the potential distributional effects of occupational class on preferences. In other words, classes may not just differ in their mean levels of preferences but also in the distribution of preferences around these class means. As we have seen above, not all classes are equally internally consistent in terms of their socio-demographic composition. Moreover, classes can also vary in their level of institutionalization (Grusky & Weeden, 2001), and we may find that certain classes are more open, in the sense that we find greater mobility in and out of them. In fact, it has been argued that low-skilled occupations, especially in the inter-personal service sector, could frequently serve as a 'springboard' into better occupations. This could entail that this class is more heterogeneous in its composition and in the preferences of its incumbents. For this reason, in the last step of the analysis I consider how occupational classes differ in the variance of issue preferences. As in earlier analyses, the focus is placed on production and service workers.

I start by comparing the variance of issue preferences and ideology of production vs. service workers by presenting, in table 2.6, the results of a variance comparison test for each of the dependent variables of interest. These are absolute differences in variance, without accounting for the impact of third factors. The results appear to contradict the expectation that the variability in the preferences of service workers would be higher than that of production workers. As a matter of fact, production workers show a greater variance of preferences on European integration, tolerance towards homosexuality and ideology. On the one issue that is

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scores (which are comparable across rounds) as provided by Ganzeboom (for rounds 1 to 5) does not alter the results of the analyses either (results not shown).

strictly related to the economic consequences of class, however, we do find that service workers' preferences show greater variability than production workers'. This could be due to service low-skilled occupations acting as springboard for higher-grade classes. If this is the case, then incumbents who expect to move upwards would be less favorable towards redistribution, and this would increase the variance in preferences of a class that we would expect to be strongly favorable to redistribution. On the issue of immigration there are no statistically significant differences between these two groups. These results are replicated if Levene's robust test statistic, which is robust under non-normality, is implemented instead (results not shown). I replicate the analyses of variance separately by clusters of countries (grouped according to patterns of employment growth) and obtain similar results (results not shown). Across different groups of countries we find that production and service workers display similar variance of their attitudes towards immigration, and that production workers have more homogeneous preferences on redistribution while for the issues of homosexuality, EU integration and ideology service workers' variance of preferences is lower.

**Table 2.6: Test for equality of variance (variance ratio test) of issue preferences and ideology of service vs. production workers**

Comparison	Opposed to redistribution		Favorable to immigration		Tolerant to homosexuality		Favorable to EU integration		Ideology	
	Std. Dev.	P> f	Std. Dev.	P> f	Std. Dev.	P> f	Std. Dev.	P> f	Std. Dev.	P> f
Production workers	0.917		0.982	0.356	1.010		1.029	0.000	2.206	0.000
Service workers	0.932	0.000	0.987		0.946	0.000	0.969		2.147	

*Note:* This table reports results from F tests for the homogeneity of variances. The standard deviation reported is the sample standard deviation of each of the outcome variables for service and production workers. P-values reported are from two-tailed tests.

Because, as we saw in the first section of this chapter, there are substantial differences in the demographic composition of occupational classes, I also study differences in variance after first controlling for the impact of third variables. To do so, I first regress preferences on the control variables included in the models in table 2.5 and compute the residuals for each observation, which will capture the variation in Y (issue preferences) that is not explained by the variables included in the model (all the controls). I then study how the variance of these residuals is associated with respondents' class location. Table 2.7 presents the variance of residuals for the different occupational classes.

**Table 2.7: Standard deviation of the residuals of issue preferences and ideology by occupational class (net of socio-demographic factors)**

	Opposed to redistribution	Favorable to immigration	Tolerant to homosexuality	Favorable to EU integration	Ideology
	Std. Dev.	Std. Dev.	Std. Dev.	Std. Dev.	Std. Dev.
Large employers	1.120	0.874	0.779	0.986	2.181
Small business owners	0.989	0.910	0.884	0.984	2.165
Technical professionals	1.022	0.839	0.793	0.947	2.086
Production workers	0.871	0.924	0.908	0.973	2.186
Managers	1.034	0.844	0.778	0.928	2.117
Clerks	0.923	0.848	0.796	0.909	2.088
Socio-cultural professionals	0.966	0.827	0.770	0.896	2.113
Service workers	0.885	0.908	0.839	0.926	2.121
Overall	0.953	0.902	0.840	0.947	2.144

Starting with the comparison between production and service workers, even when controlling for other factors, the preferences of production workers still show more variability than the preferences of service workers on all cultural issues and on ideology. Only in preferences over redistribution we find a greater variance among service workers.<sup>17</sup> As mentioned above, these overall results go partially against our initial expectations of finding greater variance among service workers. If instead of just focusing on production and service workers we look instead at the variance of the residuals for all eight occupational classes, we observe that preferences are usually more disperse for workers, except for the issue of redistribution—for which production and service workers appear as the two most homogeneous classes in terms of preferences. On attitudes towards immigration, tolerance of homosexuality and preference on EU integration, production and service workers show greater variability in their preferences than other classes. Office clerks, on their part, display variances close to those of the higher-grade classes. Another interesting finding in these analyses is that production workers show the largest variance in their ideological self-placement. A potential explanation for this could be that the redistributive (typically denominated left-wing) and authoritarian (typically denominated right-wing) preferences of production workers are not easily captured by the unidimensional left-right ideological scale.

<sup>17</sup> The paired comparisons of variance tests performed for production and service workers indicate that differences in the variance of residuals are statistically significant for all issues. The results are presented in Appendix 2.E.

## Discussion

After having reviewed different theories about the role of class as a politically divisive factor in deindustrializing democracies, this chapter set out to study whether and how classes differ in terms of specific issue preferences and ideological placement. Implementing Oesch's class scheme and studying preferences on four different issues, these analyses provide evidence against the dealignment hypothesis and favor instead the realignment thesis. In European democracies, class location continues to be associated with policy preferences and ideology. This finding also supports earlier contributions pointing to the role of the supply side in explaining the decline of class voting since, according to these studies, classes still differ in issue preferences. It is the subject of coming chapters to assess whether these differences are reflected in voting patterns. Moreover, the class differences found here provide the foundation for studying, in the next chapters, how these differences depend on the political context, and how preferences may vary as individuals experience changes in their employment careers.

Because previous research tended to focus on political differences within the middle classes, this chapter placed special attention on workers. It was particularly interesting to assess the preferences of workers in the inter-personal service logic because, with the production workers class in numerical decline, service workers could constitute a 'new' or 'post-industrial' working class. The analyses of workers' issue positioning showed that, although there are indeed some differences between them, these are relatively minor. Most remarkably, this similarity appears in spite of stark differences in the socio-demographic composition of these two occupational classes, with service workers being on average younger, more predominantly female, and more affected by fixed-term employment than production workers. Differences in issue preferences and ideology are rather slim, independent of whether we assess conditional or unconditional associations. In this sense, there appears to be one working class, at least in terms of preferences. This is a class that is characterized by their low skill level, whether employed in production or in the inter-personal service logic.

Among the lower-grade classes greater differences did appear in the comparison of office clerks against production and service workers. Office clerks are positioned, on average, closer to professional classes. In fact, differences between production workers and office clerks on the issue of ideology are larger than with certain groups of professional employees, namely socio-cultural and technical professionals. Finding office clerks to be more culturally libertarian than service workers ran against our expectations about the impact of work logic. Moreover,

although we suspected that this could be due to a differential composition in educational attainment between these two classes, the differences persisted even after controlling for education. While the inter-personal service logic appears to have culturally libertarian implications for the middle classes, this is not reflected among the lower-grade classes.

Even if some of the differences among workers on issue preferences are not very large, this is also the case for some of the comparisons between higher-grade classes. Among the latter, the largest differences appear because socio-cultural professionals distance themselves from technical workers and managers. On the cultural issues, the largest differences among workers (the comparison between production workers and office clerks) are comparable in size to the horizontal variation among higher-grade classes. Horizontal differences on redistribution are, however, larger within the middle class. When we look at differences in preferences within each specific work logic (along the vertical dimension), we do not see, as some had suggested, that vertical differences are smaller within the inter-personal service logic. In fact, differences tend to be smaller within the organizational work logic, mostly because office clerks are positioned closer to professional employees.

Another interesting contribution in this chapter is that it not only considered differences in mean levels of issue preferences and ideological placement, but also analyzed how the dispersion of preferences varied between occupational classes. Against the initial hypothesis of greater dispersion among service workers, it is production workers who show comparatively greater variance of their preferences on all cultural issues and on ideology. Overall, the analyses of variance indicate that the lower-grade classes display greater dispersion in their preferences, with the exception of the issue of redistribution.

The analyses here presented set the foundations for the questions that will be addressed in the following chapters. They do so in two different ways. First, they indicate that we still observe class-distinct preferences in post-industrial societies. This provides the basis for studying whether these differences depend on the political context, whether they are also manifested in differences in electoral behavior, and also how these preferences vary as individuals experience changes in their class location throughout their employment careers. Secondly, this chapter summarizes how classes are positioned in different dimensions of political conflict, and reveals strong similarities between production and service workers. This is an interesting point because, while existing literature has tended to focus on the preferences of a traditional industrial left-wing constituency in decline, little attention has been paid to the

political orientation of service workers. Finding that production and service workers are relatively similar in their preferences implies that, whereas one of these constituencies is in decline, its electoral relevance could be replaced by the other. These two classes form a rather homogeneous authoritarian left-wing constituency. As I mentioned above, it remains to be seen whether this homogeneity in preferences is also reflected in electoral behavior. When considering the potential class coalitions that parties can mobilize, it is interesting to note that these two classes are similar also when only considering the 'unconditional' effect of class. This means that parties would be faced with a constituency that is quite heterogeneous in terms of demographic factors—which could make its mobilization more difficult—but, at the same time, very similar in the kind of policy positions it favors.



## **Chapter 3**

# **The moderating role of the politicization of the supply side in the association between class and preferences**

### **Introduction**

As mentioned in the previous chapter, if social classes are to hold distinctive party preferences and voting patterns, we should first find that these groups differ in terms of political preferences over specific issues. The analyses in chapter 2 indicated that occupational classes continue to display divergent preferences not only on economic issues (as we would expect from an economic self-interest perspective) but also on issues associated with the cultural dimension of conflict, like tolerance towards homosexuality, attitudes towards immigration, or towards EU integration. This chapter also indicated that not all classes are equally distinctive in terms of these preferences. Regarding our interest in the potential division between production and service workers, the analyses returned rather slim differences between these two groups, despite dissimilarities in the job context and daily work experiences of the occupations included in each of these two classes.

Having found that classes differ in issues preferences indicates that there is potential for class voting in post-industrial European societies. However, before addressing the question of whether classes differ in their party choices, in this chapter I first consider the moderating role of the political context in determining the strength of the association between class and preferences. References to the supply side of electoral politics have become increasingly relevant in explaining time trends (and cross-country variation in these trends) in class politics. Extant literature has emphasized the need to account for the configuration of the supply side when assessing how class and other socio-structural characteristics relate to voting (Elff, 2007, 2009; G. Evans & De Graaf, 2013a; G. Evans, Heath, & Payne, 1999; G. Evans & Tilley, 2012a, 2012b, 2017). Indeed, this literature has found that political parties, partisan elites, and the media play a fundamental role in determining whether class distinctiveness in political and social preferences will be translated into distinct voting patterns. In contrast to the argument made by the dealignment thesis, these studies show that there is no univocal generalized structural decline in class-voting. The extent to which this phenomenon occurs depends on political factors, especially on what parties do and on whether they offer clear alternatives to

voters. Hence, the association between class—or other socio-structural factors—and voting hinges crucially on the interaction between the supply and demand side of electoral politics.

In this chapter I contribute to this emerging literature and extend the analyses of the previous chapter by taking into consideration the supply side of politics. I specifically account for the politicization of policy issues by parties, and assess how this measure moderates the association between occupational class and issue preferences. In doing so I consider the same issues as in the previous chapter, as well as ideology. I build on the theoretical contributions from the literature that has assessed the fundamental role of the supply side for class politics (e.g. Elff, 2009; G. Evans & De Graaf, 2013a) but also on studies in political psychology that have addressed parties' influence on attitude formation (e.g. Leeper & Slothuus, 2014; Petersen, Slothuus, & Togeby, 2010). Moreover, these analyses also provide further insights into the question of whether political differences between production and service workers are larger in certain political contexts. My main expectation is that class differences in issue preferences will be larger in party systems where parties take more polarized positions and attribute greater salience to the issue under consideration.

The cross-level interactive models based on data from the European Social Survey (ESS) combined with information on the supply side from the Chapel Hill Expert Survey (CHES) support this presumption, although with certain caveats. In countries where parties take more diverse positions on an issue and this issue is relatively more salient we find greater differences in preferences between classes. However, this is only the case for three of the four policy issues considered. Another interesting point stemming from the analyses below is that not all classes are equally responsive to the supply side, that is, for certain occupational classes average levels of preferences do not vary in accordance to the configuration of the partisan supply. The results, thus, indicate that there is certain class heterogeneity in how the political supply moderates preferences. The professional classes tend to display a stronger association between issue preferences and the supply side than workers. This is especially the case for socio-cultural professionals.

The next section discusses the theoretical underpinnings for the hypotheses about the role played by the supply side in the association between social class and policy preferences. This is followed, first, by a descriptive account of the politicization of different issues across countries, and second by the analyses on the moderating role of the politicization of the different party issues in the political system. The last section concludes.

## **Theoretical background and hypotheses**

Although already in 1969 Sartori proposed that conflicts and cleavages could be either deflected or activated by the actors of the political system, the proposition to include an account of the configuration of the partisan supply in the study of class voting appeared only rather late in the debate on whether class still has an impact on voting and partisanship in post-industrial democracies. From a purely bottom-up approach, the dealignment thesis describes a process of generalized decline in the relevance of social class and other socio-structural factors as explanators of electoral behavior and partisanship. A number of scholars within this strand posit that, because of socio-economic transformations (such as increasing social mobility, rising living standards, educational expansion or cognitive mobilization), social anchors of political behavior have come to play a minor role, while other short-term factors like candidate images or issue opinions have gained in relevance (Clark et al., 1993; Dalton, 2008; Franklin, 1985; Rose & McAllister, 1986). According to this thesis, the blurring of social divisions is behind this generalized decrease in class voting in advanced industrial democracies. Some of these claims are partly based on the argument that economic and social risks are increasingly individualized in post-industrial globalized societies, hence ‘aggregations’ like social class come to play a smaller role (Beck, 2007). This is a purely demand-side argument—or bottom-up, as described by Evans and Tilley (2012a)—in which political change is driven by generalized socio-structural transformations. Although this thesis was mainly elaborated to account for party choice in elections, it indirectly implies that the blurring of social divisions has also led to reduced distinctiveness in the policy preferences and attitudes of social groups (whether based on class, religion, or other factors). However, as we saw in the previous chapter, social classes do differ in their ideological positioning and in preferences over different issues. Moreover, we also found that class is related to unemployment and to atypical forms of employment. Hence, the analyses conducted thus far do not provide support for a dealignment thesis that is predominantly based on the notion that socio-structural factors do not ground differences in economic risk or social attitudes and preferences.

Against this thesis of a generalized decline in the relevance of class, some scholars have contended that no account of trends in class voting is complete unless it takes into consideration changes in the supply side of electoral politics (e.g. Elff, 2009; G. Evans & De Graaf, 2013b). In other words, the approach within the dealignment literature is incomplete because it neglects the role of parties in mobilizing and attracting specific constituencies. When analyzing whether social classes differ with respect to issue or political preferences, we should,

therefore, take into account how the partisan offer is articulated. The differences we find between social classes along issue preferences or ideological lines are likely to be conditioned by the degree to which parties offer clear policy alternatives on these issues. In a discussion about the overlap and interaction between the disciplines of sociology and political science, Sartori (1969) argued that the conception of political conflict as a mere 'translation' of social conflict was naively simplistic. Although not empirically tested at that time, his argument proposed that conflicts and cleavages could be repressed or, on the contrary, activated and reinforced by actors of the political system (such as parties). According to his view 'objective cleavages' could be manipulated according to alignment strategies. This kind of approach emphasizes the role of the supply side, but it is not purely top-down, since it proposes an interaction between the demand and supply side of electoral politics. Including an account of the supply side appears warranted by the lack of evidence of a generalized cross-national decline in class voting across post-industrial societies. As Evans and De Graaf (2013a) and Elff (2007, 2009) have argued, cross-national and temporal variation in the relevance of class voting seem to indicate that political factors at the country level could be behind some of this variation. On the supply side, features of party competition such as the extent to which parties take differing positions along the ideological or value dimension have been the main focus in this research strand.

This emphasis on the supply side, and on how it can affect class voting was already encompassed in the cartelization theory, and in its account of how political conflict has changed in post-industrial democracies due to parties' actions. Following the cartelization hypothesis, if parties have colluded in the range of policies they offer to voters, then, differences in policy preferences rooted in socio-structural factors cannot be manifested through voting because parties do not offer real alternatives.<sup>18</sup> Extended cartelization across party systems would then lead to similar predictions as those coming from the dealignment thesis, i.e., we would observe a univocal decline in class voting across countries. Party convergence is conceived as a fundamental trait of current democracies not only in the cartelization thesis (where collusion is intentional), but also in the literature that regards party convergence as a consequence of political economic constraints external to the party system. That is, under increasing globalization and economic competition between countries, especially within the context of the European Union, left- and right-wing parties would be increasingly constrained in the kind of

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<sup>18</sup> For a detailed account of the cartelization theory see Katz and Mair (1995).

economic policies they are able to implement (Rhodes, 1996). As a consequence, convergence on economic policy issues occurs. In contrast to the dealignment hypothesis, the cartelization and the political economic constraint approaches do not ground the decline of class politics in socio-structural transformations but rather on parties' and elites' actions. Thus, in contrast to the analyses here conducted, this is an exclusively top-down transformation. Nevertheless, their account of the impact of the supply side offers some insights about how it can moderate the expression of class differences.

The strength of class voting will, thus, not only depend on how distinctive classes are in social and economic terms, but it will also be conditioned by the extent to which parties present clear policy alternatives that are associated with classes' preferences (Elff, 2009; G. Evans & De Graaf, 2013a; G. Evans et al., 1999; G. Evans & Tilley, 2012a, 2017). It is fundamental for the political articulation of social divisions that parties provide alternative programmatic positions. When there is variation in these positions, then distinct preferences between social groups can find expression through different parties. If, on the contrary, parties do not offer real programmatic alternatives, class differences cannot be made manifest through party choice. The choice set offered by parties constrains the degree to which social divisions can be translated into political divisions (G. Evans & De Graaf, 2013a). By the same token, even if parties offer distinct alternatives, we should not observe political divisions where no social divisions exist.

In this chapter I diverge from the contribution by Elff (2009), Evans and De Graaf (2013a), and Evans and Tilley (2012a, 2017) since instead of focusing on the moderating role of the supply side on the association between social class and party choice, I concentrate instead on its implications for class distinctiveness in policy preferences and attitudes. As the literature in political psychology has indicated, parties do not only play a crucial role in representing programmatic preferences held by different constituencies, but also in articulating these preferences and providing cues to voters about positioning on several issues.

The scholarship on public opinion has recognized that material interests, group affiliations or values can be key determinants of voters' attitudes. However, whether and how these predispositions are translated into specific choices (e.g. on public policy issues) is not an automatic process, and it hinges crucially on the political context (Leeper & Slothuus, 2014; Zaller, 1992). As the most visible actors articulating political competition, political parties play a crucial role in this process. The articulation of policy preferences or of an ideological

standpoint places demands in terms of skills, resources and motivation on voters. In this cognitively demanding process of preference formation, parties can serve as a heuristic, which reduces the costs of information and provides cues to voters about which issues are central in the political conflict and how these issues relate to their interests (Leeper & Slothuus, 2014; Medina, 2015). For social class to have an influence on policy issue preferences, individuals need to establish a connection between their class location and different positions in the political conflict. Whether and how this connection occurs can depend on how issues are framed in the elite debate (Kinder, 1998 in Leeper & Slothuus, 2014). In the process of opinion formation parties have a crucial role in structuring choices and connecting different choice options to individuals' predispositions (Petersen et al., 2010). This has been studied not only with relation to material self-interest (e.g. Cavaille & Neundorf, 2016), but also in terms of cultural values (Petersen et al., 2010).

The politicization by parties of specific policy issues that are relevant to class interests should raise the awareness of these class-related interests among voters. Political competition between partisan elites alters the amount and types of information available to voters, and they also activate or undermine politically relevant heuristics (Cavaille & Neundorf, 2015, 2016). Implementing an experimental design, Petersen et al. (2010) show that salient competition between political parties facilitates that voters connect particular values with policy positions. Studying partisan competition over redistributive issues, Cavaille and Neundorf (2015, 2016) found that attitudes towards redistribution are more reactive to self-interest and material conditions (e.g. experimenting a drop in income or change in employment status) when partisan elites are visibly contesting an issue. As Zaller (1992) indicated, the variance of positions among the elites appears to lead to polarization among the electorate, and changes in how elites contest specific policy issues seem to be related to changes in mass preferences. In instances where parties downplay an issue or take similar positions on it, this should be conducive to lower differences among voters.

Previous analyses of how partisan polarization intervenes in the relationship between social class and party choice were conducted under the expectation that, if voters are responsive to what parties offer, then higher party polarization should increase the magnitude of the association between social position and party choice. In contrast, under party convergence the signals to voters are weakened and so are class differences in electoral behavior. The country-by-country analyses in Evans and De Graaf (2013b), and also the studies by Elff (2007, 2009) lend credibility to the argument about the interaction between the supply

and the demand side since, even though they observe some decline in the importance of social cleavages, this decline is neither linear, nor universal. What parties do in the electoral competition for votes makes a difference for the political relevance of social cleavages. This has been studied not only for how classes vote for parties occupying different positions in the ideological left-right spectrum, but also in specific issue dimensions. For instance, Goldberg and Sciarini (2014) found that, in Switzerland, the integration versus demarcation cleavage has become relevant in explaining party choice and that occupational classes are differently positioned on this issue because party-system polarization on the issue increased.

Other studies accounting for the supply side and for the political opportunity structure focused specifically on certain party families, and how these mobilize specific segments of the electorate. Arzheimer (2009), for instance, assessed how the partisan supply intervenes in the mobilization of extreme right support. In this research, the measures taken to characterize the supply side tend to be specific to the party family under consideration, e.g. the most radical position on populist-right issues taken by a party that is not part of the populist right, or the variance and salience that all established parties attribute to the issues of the extreme right. Other analyses that looked more generally at the impact of parties' positioning on class voting, without centering the attention on a particular party family or class, took an accordingly more encompassing measure to characterize the supply side. For instance, Evans and Tilley (2012b) measure party polarization as the difference between the two main parties on the left-right ideological dimension, while Elff (2009) implements a different approach (through discrete choice modelling) that takes into consideration the position that parties take on two different dimensions: the economic left-right and the libertarian-authoritarian dimension.

Clearly, there are different options to operationalize what parties offer. A comprehensive account of the supply side, however, should take into consideration the different options that are available to voters and how these differ on a varied set of issues. Another insight to take from the extant scholarship on public opinion is that both parties' positions on issues and the salience they attribute to these issues will play a crucial role in the opinion formation process. Accordingly, to account for the moderating role of the partisan supply I do not only focus on how distinct party positions are, but instead I rely on a composite measure of politicization that takes into account both party polarization (i.e. the intensity of conflict) and the salience of different policy issues (i.e. the conflict's visibility) (Hutter & Grande, 2014). When policy issues are politicized, it is more likely that respondents will take strong positions around them, and that preferences based on socio-structural factors will be

crystallized. If parties take diversified positions on an issue, but this issue is hardly salient in the political debate, then we do not expect parties to have a central role in how and to what extent social groups articulate and form distinctive preferences around this issue. By the same token, if an issue is highly salient but parties' positions on it have converged then, again, we do not expect to find much class distinctiveness in voters' preferences. In the following analyses, I consider class preferences on the same dimensions of conflict as in the previous chapter since social class should be relevant for individual predispositions on each of these issues. Because of limitations due to data availability, I cannot compute a measure of politicization of the ideological left-right conflict. For this reason, I can only hypothesize about and test the moderating role of polarization in this dimension (i.e. not taking into account salience).<sup>19</sup>

**H1:** *Under greater polarization of the ideological left-right conflict occupational classes will differ more in their ideology.*

As mentioned above, parties' polarization on the ideological dimension of conflict has been frequently included as a characteristic of the supply side in earlier studies of class voting. However, less attention has been placed on the extent to which parties differ and the salience they attribute to specific policy issues. As in the previous chapter, in these analyses I study preferences over redistribution, attitudes towards immigration, tolerance towards homosexuality and preferences over EU integration.

**H2:** *Under greater politicization of an issue by parties, occupational classes will differ more in their preferences on this issue.*

Focusing specifically on workers, we can expect that some of the minor differences we identified between service and production workers will be greater in contexts of higher politicization of issues. Moreover, studying these constituencies across different political contexts will provide further insights about the conditions under which production and service workers constitute a single left-authoritarian coalition. Generally considering the whole occupational structure, we expect class preferences to be more distinctive in contexts of higher partisan politicization, but this distinctiveness can take on different shapes. Figure 3.1 displays two representations of how occupational class can be associated with preferences under different levels of politicization of an issue. The x-axis captures the degree of politicization of an issue (with lower values to the left of the axis indicating lower politicization) and the y-axis

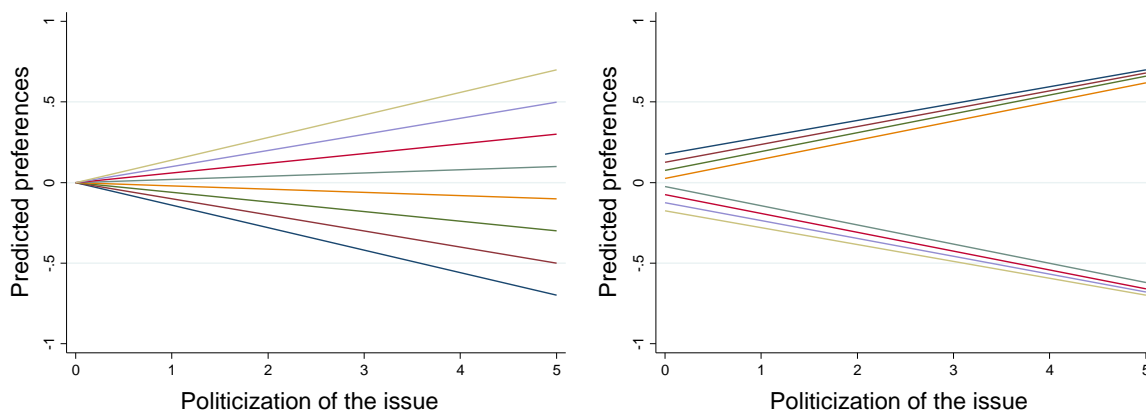
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<sup>19</sup> No measure of salience is available for the left-right ideological scale in the CHES dataset.



captures predicted levels of preferences. Each line represents a social class. The left panel in the figure presents a fan-out effect, where classes with more extreme preferences on issues are increasingly dissimilar in contexts of higher politicization, while classes with more moderate preferences are not as strongly affected by politicization, i.e. they remain moderate in their preferences. Alternatively, as represented in the right panel, all occupational classes could become more extreme in preferences, converging towards the classes with highest opposition and support on a specific issue. For example, on the issue of redistribution this would imply that under higher degrees of politicization of the issue most classes would be located at either extreme of the issue scales (the poles that we saw were occupied by production workers and large employers and self-employed professionals) with few (or no) classes showing moderate preferences on the issue. Because I do not expect politicization to affect the nature of the association between class and preferences (it should only moderate its strength), the sign of the class coefficients should not be affected by the degree of politicization. For instance, production workers should always be more favorable to redistribution than other social classes, independently of whether this issue is weakly or strongly politicized. What should be affected by politicization is how strongly this group differs from other classes. In the representation in figure 3.1, the intercepts indicate average class preferences when politicization is lowest. We may find that differences in intercepts vary across issues, indicating that on some dimensions classes show distinct policy preferences even in the absence of strong politicization of this dimension. For example, class differences could be relatively larger on economic issues even under low politicization, given that class location is a more direct measure of economic conditions and prospects.

**Figure 3.1: Graphical representation of two different patterns of association between class and preferences across politicization of an issue**



An analysis that emphasizes the role of the supply side of electoral competition is frequently not exclusively top-down, since changes in the supply side can also reflect structural changes in the demand side. If the composition of the electorate changes, an example of which could be the decline of the blue-collar industrial class, then office-seeking parties will probably react to these changes and adequate their appeals to the changing composition of the electorate. This reaction by parties to socio-structural changes could potentially introduce problems of endogeneity in the analyses. This threat of endogeneity on whether parties lead or follow public opinion has also been frequently debated in the political psychology scholarship (Leeper & Slothuus, 2014). Ideally, one would solve this problem by resorting to panel data, in which we could follow individuals' trajectories in preferences and see how they react to changes in the supply side. This is what Cavaille and Neundorf (2016) analyze in their single country study. This is however not possible to undertake with cross-national data. To address this risk of endogeneity, I replicate the following analyses using information about the partisan supply only from waves of the CHES that were fielded at least two years before the ESS (and I obtain comparable results). Nevertheless, this does not preclude the possibility that parties preemptively react towards future (expected) changes in preferences. In any case, the moderating role of the supply side on the class-preferences association has not been studied thus far and, even if the analyses at hand cannot fully isolate a causal relationship, the fact that we do find this moderating role for certain issues indicates that this constitutes an interesting line for further research. Moreover, in one of the few longitudinal analyses assessing the 'reactivity' of economic preferences to personal hardship, Cavaille and Neundorf (2016) identify and argue that partisan elites' decisions to contest an issue usually precede aggregate attitudinal change as measured by survey data.

### **Data and methods**

The empirical analyses in this chapter extend those in the previous one by including an account of the moderating role of the supply side in the association between occupational class and issue preferences. Accordingly, to test the arguments developed above, it is necessary to combine individual-level survey data from the ESS with information on parties' positions on different issues, and the salience they attribute to them. For this purpose, I rely on the data included in the 2006 and 2010 rounds of the CHES. The CHES provides data on the positioning of political parties along different issues based on expert surveys. The positioning for each party results from an average of expert judgements. The CHES is particularly suited for the analyses

of this chapter, because it provides independent measures of party's positioning on different issues as well information about the salience that each party attributes to these issues.

One of the advantages of using expert surveys in comparison to data coming from parties' own manifestos is that parties could attempt to blur in their manifestos some issue positions that could conflict with parts of their constituencies or with certain segments of the electorate. However, parties' positions on these issues could be made manifest by the media or by competing parties, which would make them visible to the electorate even if hidden in the manifestos (Kitschelt, 2007). This, however, is likely to be captured by experts' judgements. The limitation of the CHES is that it is conducted every four years, so the data from one round of the CHES is used to characterize the partisan supply in two rounds of the ESS. Moreover, the first two rounds of the CHES (conducted in 1999 and 2002) do not include comparable survey items to the issue preference items included in the ESS, so there are no counterparts at the party level of the individual-level preferences. As a consequence, the analyses must be restricted to rounds 3 to 6 from the ESS. Although this reduces the number of cases under consideration, by pooling the data for the different rounds, there is still a sufficient number of observations by occupational class to precisely estimate class coefficients, and there is also a sufficiently large number of level-2 observations (country-round) to be able to estimate a multilevel model with cross-level interactive terms.

The key dependent variables in this analysis were already addressed in the previous chapter, since we are concerned again with the association between occupational class and issue preferences. The issues studied are again: preferences on whether the government should intervene to redistribute income, attitudes towards immigration, tolerance towards homosexuality, preferences over EU integration and, lastly, the encompassing dimension of left-right ideology. Likewise, similar control variables are included in the regression models: sociodemographic controls for age and gender, and additional controls for labor market status, level of educational attainment and trade union membership.<sup>20</sup> As before, all dependent variables except for ideology have been standardized to be able to compare results across models.

Since our interest lies in assessing whether the partisan supply moderates the association between occupational class and issue preferences, empirically we must assess

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<sup>20</sup> Similar results were obtained from analyses excluding the controls for education and trade union membership.

whether there is an interactive effect between occupational class measured at the individual level and the politicization of an issue at the party system level. To be able to conduct these analyses it is necessary to find a match between preferences and the issues on which experts positioned parties, that is, a correspondence between issues in the ESS and the CHES.<sup>21</sup> Among the different items included in the CHES dataset, those selected to match individual preferences are: (i) on redistribution, the (party's) "*position on redistribution from the rich to the poor*"; (ii) on immigration, the "*position on immigration policy*" (ranging from strongly opposing tough policy to strongly favoring tough policy); (iii) on tolerance towards homosexuality, the "*position on social lifestyle (e.g. homosexuality<sup>22</sup>)*" (ranging from strongly supporting liberal policies to strongly opposing liberal policies); (iv) on European integration, the "*orientation of the party leadership towards European integration*" (ranging from strongly opposed to strongly in favor); and, lastly, on ideological positioning, the "*position of the party in terms of its overall ideological stance*". Besides positioning parties on these issues, experts were also asked to indicate the salience that parties attribute to these issues. The question on salience, however, is not asked for overall ideological placement. Both party positions and the salience of issues were measured on a scale from 0 to 10, except for the issue of EU integration, for which position was measured on a scale from 1 to 7, and salience on a scale from 1 to 4.

These different items are used to construct a measure of politicization of each issue in each country. This measure of politicization is the product of the standard deviation of parties' positions on an issue in a country (taking into account only parties with parliamentary representation) and the relative salience of the issue in that country. The relative salience of an issue within a party system is the ratio of the average salience of that issue (computed across parties) and the average salience over all issues within a party system (computed again over all parties with parliamentary representation in the country).<sup>23</sup> For example, in the first wave of the CHES in Belgium the standard deviation of parties' positions on the issue of redistribution takes the value 1.906. In this party system, the average salience of the issue of redistribution is of 5.802 on the scale, while the average salience of all issues is of 5.578. This indicates that the

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<sup>21</sup> A similar approach to combining CHES and ESS data to study government-citizen congruence on different issues has been implemented by Stecker and Tausendpfund (2016).

<sup>22</sup> The example is included as such in the questionnaire submitted to experts.

<sup>23</sup> The average salience of all issues within a party system is calculated based on those issues that are repeated across the two rounds of the CHES under consideration to have a comparable measure across CHES waves. Besides those that are the focus of the analyses, the other issues included in the calculation of the denominator in this ratio are: improving public services vs. reducing taxes, deregulation, civil liberties vs. law and order, religious principles in politics, urban vs. rural interests, political decentralization to regions/localities, and ethnic minorities.

issue of redistribution is relatively more salient than other issues. For this country, the measure of politicization of redistribution takes the value of 1.982, which is equivalent to multiplying 1.906 times the ratio of the salience of redistribution (5.802) by the average issue salience (5.578).<sup>24</sup>

Due to the nested structure of the data (individuals nested in country-year combinations) I implement multilevel regression models to test the interactive effect between occupational class and politicization of issues. Because occupational class is a categorical variable I introduce one interaction term between each measure of politicization and each of the seven occupational classes left after setting production workers as the reference category. All analyses are based on linear random intercepts models, to control for possible average differences between countries on levels of issues preferences.<sup>25</sup> I estimate one model for each of the dependent variables under consideration (the preference items), each including the interactive terms with the appropriate politicization item. To facilitate the interpretation of the results from the regression analyses I present average adjusted predictions of preferences by occupational class along different levels of politicization of each of the issues under consideration.<sup>26</sup>

## Results

Figure 3.2 presents the degree of politicization of the different issues under consideration for each country and year (2006 and 2010) included in the CHES. At first sight, it appears that the EU integration issue is clearly less politicized than the other three for almost all countries and years. This indicates that class differences on this issue could be smaller, since the degree of politicization is on average lower. The analyses in the previous chapter (which were based on a different sample) indicated that class differences on the issue of EU integration were (on average) slightly smaller than on other issues. However, these were average differences independent of the degree of politicization of the issue in the country.

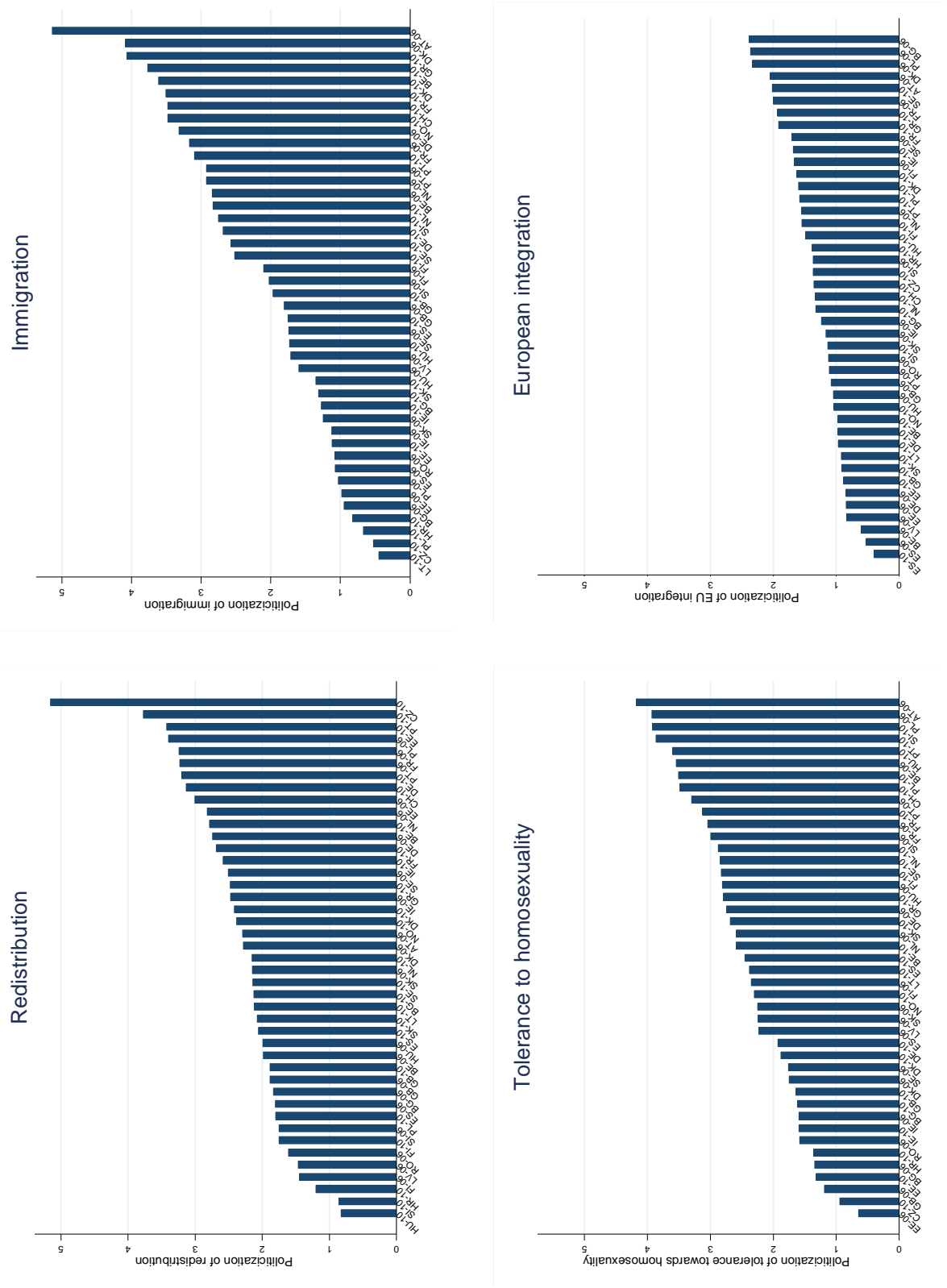
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<sup>24</sup> In this specific case the calculation is performed as follows:  $1.906 \cdot \left(\frac{5.802}{5.578}\right) = 1.982$

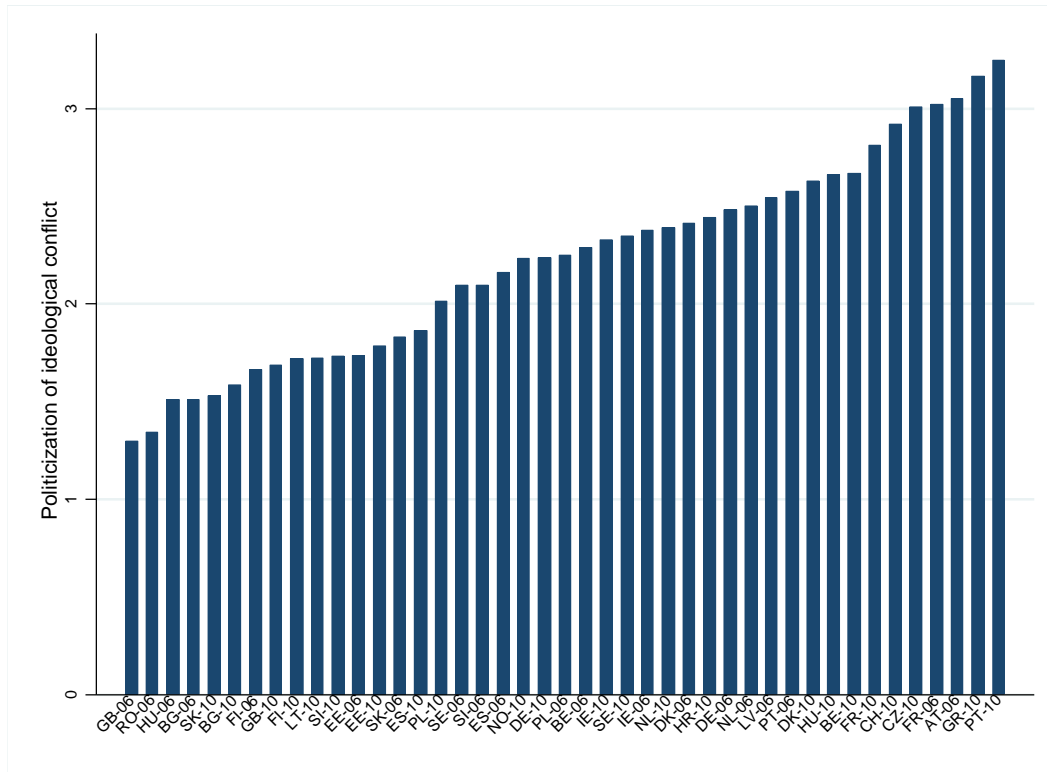
<sup>25</sup> I have specified the models with random slopes for class and the results lead me to the same conclusions.

<sup>26</sup> Details on the question wording of the different items, together with descriptive statistics and the list of countries included in the sample are available in Appendix 3.A.

**Figure 3.2: Politicization of the issue of redistribution, immigration, tolerance to homosexuality and EU integration by country-year**



**Figure 3.3: Polarization of the ideological left-right conflict by country-year**



Comparing the distribution of observations across the four figures, we find that it is on the issue of immigration where we find greater variation in the degree of politicization across country-years. Across the four issues under consideration, redistribution and tolerance to homosexuality show slightly higher baseline levels of politicization. Focusing on each issue separately, on the issue of redistribution there is no particular geographical or time clustering of politicization. We find both Western European and Eastern European countries with high and low politicization in both 2006 and 2010. On the immigration issue we do observe considerable regional clustering in degrees of politicization, since there is an overrepresentation of Western European countries in the highly-politicized end, while there is an overrepresentation of Eastern European countries at the lower end. There is also some degree of temporal clustering since some of the highest measures of politicization also take place in the year 2010. However, under low politicization we find observations for both time points. On the issue of tolerance to homosexuality and European integration there is no particular clustering of country-year units.

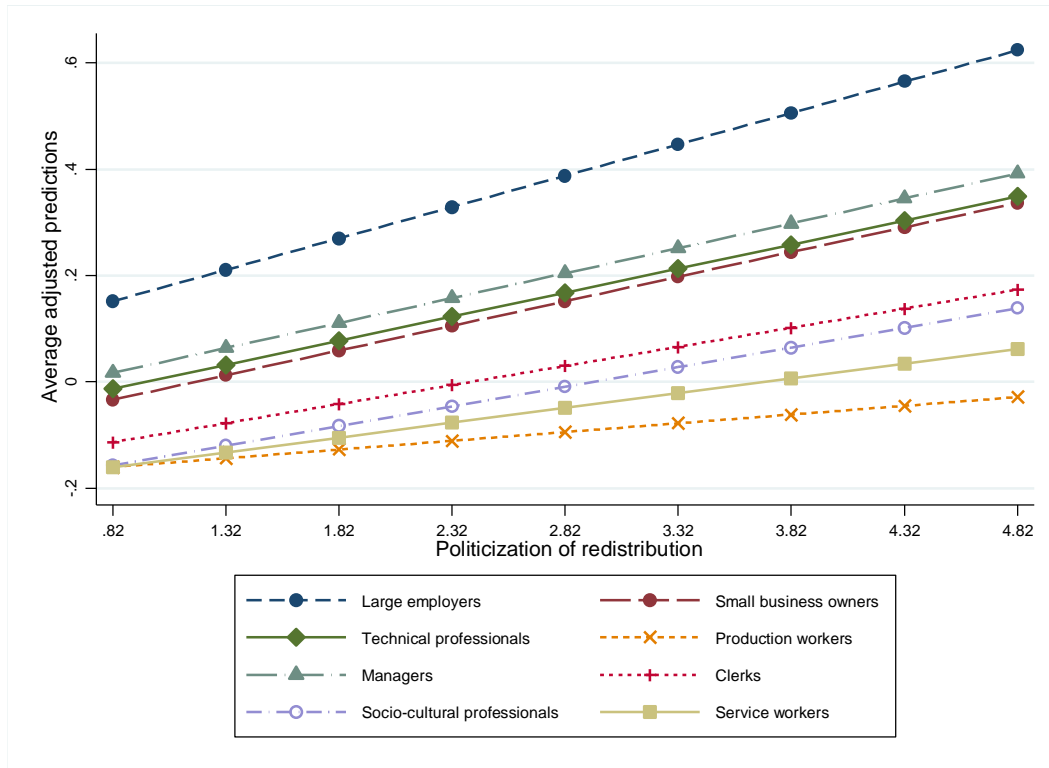
Figure 3.3 presents the distribution of the polarization of the ideological left-right conflict by country-years. Because of the differences in measurement we cannot compare levels of polarization of this dimension to those of previous issues. There is substantial variation in the levels of polarization of the ideological conflict across country-year units. We do not observe any particular time clustering in the distribution of this variable. However, there is a slight degree of geographical clustering, since Eastern European countries appear overrepresented at lower levels of ideological polarization.

Having considered the distribution of the key independent variables capturing the configuration of the supply side across country-year units, the next analyses assess whether these factors moderate the association between class location and issue preferences and ideology. The first model studies the association between occupational class and preferences over redistribution. As in chapter 2, higher values on the dependent variable indicate that the respondent opposes governmental intervention to redistribute income. Figure 3.4 presents average levels of preferences for the eight occupational classes under consideration for different levels of politicization of the redistribution issue, which ranges between the minimum level of politicization in the sample (0.82) to the highest level (5.16). Graphically, we observe that preferences of the different occupational classes are more spread apart as we move from lower to higher levels of politicization, that is, differences in preferences over redistribution between occupational classes are greater when the politicization of the redistribution issue is higher, in line with what we expected in hypothesis 2. This is also reflected in the coefficients for the interactive terms in Model 1 in Appendix 3.B, which are all significant at least at the 0.01 level and indicate that all classes become more opposed to redistribution (in comparison to production workers) as the politicization of this issue increases.

As suggested by the last chapter, production workers appear as the class most supportive of income redistribution, although for the lowest levels of politicization office clerks, and, especially, socio-cultural professionals and service workers hold very similar preferences (-0.16 points on the standardized scale for production workers, -0.11 for office clerks, -0.16 for socio-cultural professionals, and -0.16 for service workers). The differences between these classes, however, grow apart in more politicized contexts. Small business owners, technical professionals and managers appear more opposed to redistribution, and the difference between these three classes remains relatively stable across the range of politicization (a difference of 0.051 points in the standardized scale between small business owners and managers at the lowest level of politicization, and of 0.055 at the highest level). Self-employed



**Figure 3.4: Average adjusted predictions of preferences over redistribution across occupational classes for different levels of politicization of this issue**



professionals and large employers appear further apart, as the class consistently most opposed to redistribution.

It is also interesting to note in this figure that the preferences of production workers on redistribution are more or less stable for different levels of politicization (the slope of predicted preferences is flatter for this class), hence, we do not find that workers become more extreme in their preferences at higher levels of politicization. For self-employed professionals and large employers on the other pole, we do observe that their positions are more extreme at highest levels of politicization. Moreover, the increase in the dispersion of preferences along politicization is higher for workers than for professional classes. Differences in preferences among higher-grade classes are quite stable along politicization (although they are all, on average, more opposed to redistribution when this issue is politicized). Socio-cultural professionals, which appear rather close to low-skilled workers are increasingly opposed to redistribution as politicization increases. This indicates that a coalition of the classes most favorable to redistribution would be under rising tension as the politicization of this issue

increases. Although socio-cultural professionals, service and production workers, and office clerks are always located on the redistributive pole, the differences between these classes become larger as politicization increases.

Figure 3.5 presents average adjusted predictions of attitudes towards immigration. On the Y axis, higher values indicate more positive attitudes towards immigration, while lower values indicate opposition to immigration. In this case, again, production workers appear on one pole of the distribution, since they are the class most opposed to immigration along all levels of politicization. As was the case with the issue of redistribution, we find again that differences in preferences between occupational classes are greater in contexts where parties take more dispersed positions on the issue of immigration and attribute greater salience to it. The difference in the impact of politicization for the different classes (with respect to production workers) is confirmed by the significance of the coefficients for the cross-level interactive terms, which are summarized in Appendix 3.B. In this case, we do observe that the classes with the most supportive and opposed attitudes towards immigration become more extreme in their preferences as politicization increases, while classes with more moderate preferences display greater stability of preferences over politicization. In terms of the differences among workers, while service workers hold similar preferences to production workers for low levels of politicization (a difference of 0.027 points on the standardized scale), the difference grows larger for the highest levels of politicization (0.168 points).<sup>27</sup>

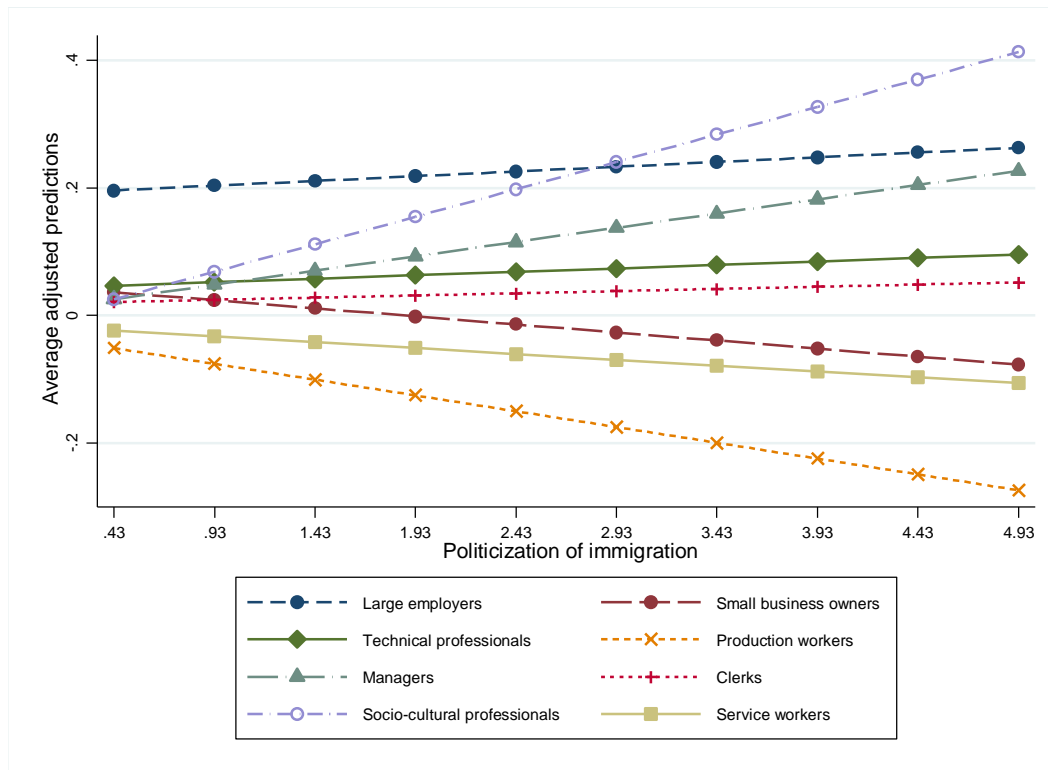
The two occupational classes for which the slope along politicization of immigration is steepest are production workers and socio-cultural professionals. Since the units of the dependent variable are factor scores from a factor analysis, we see that the differences between the scenario with the lowest and highest politicization are substantial. In the context of lowest politicization the difference between these classes is almost 0.08 points in the factor score (which amounts to one tenth of the standard deviation of the variable), while at the highest level of politicization it is about 0.70 points, which amounts to more than two thirds of the standard deviation of the variable.<sup>28</sup> As Goldberg and Sciarini (2014) found in the Swiss context, the particular opposition between socio-cultural professionals and production workers on the

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<sup>27</sup> While the difference in attitudes towards immigration between these two groups is only significant at the 0.10 level at the lowest level of politicization, for the highest level of politicization in the sample it is significant at the 0.001 level.

<sup>28</sup> The differences in preferences between these two classes are statistically significant at the 0.001 level for the whole range of the politicization variable.

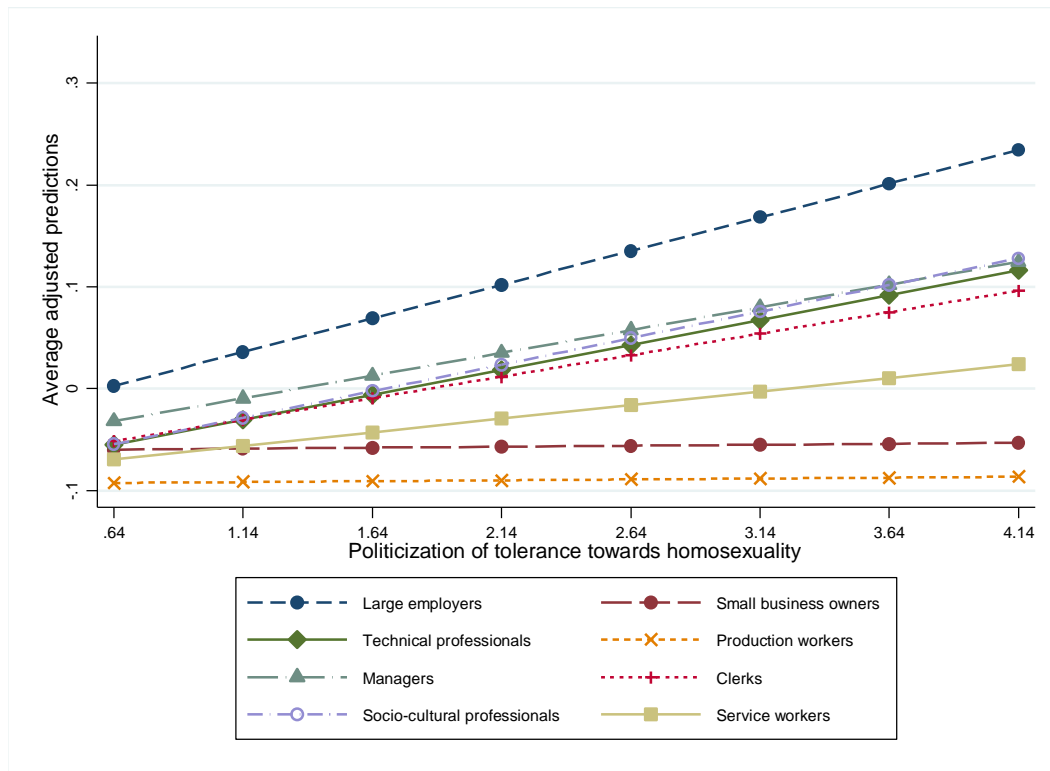
**Figure 3.5: Average adjusted predictions of attitudes towards immigration across occupational classes for different levels of politicization of this issue**



cultural dimension appears to be strongest in those contexts where this dimension of conflict has been emphasized by political parties.

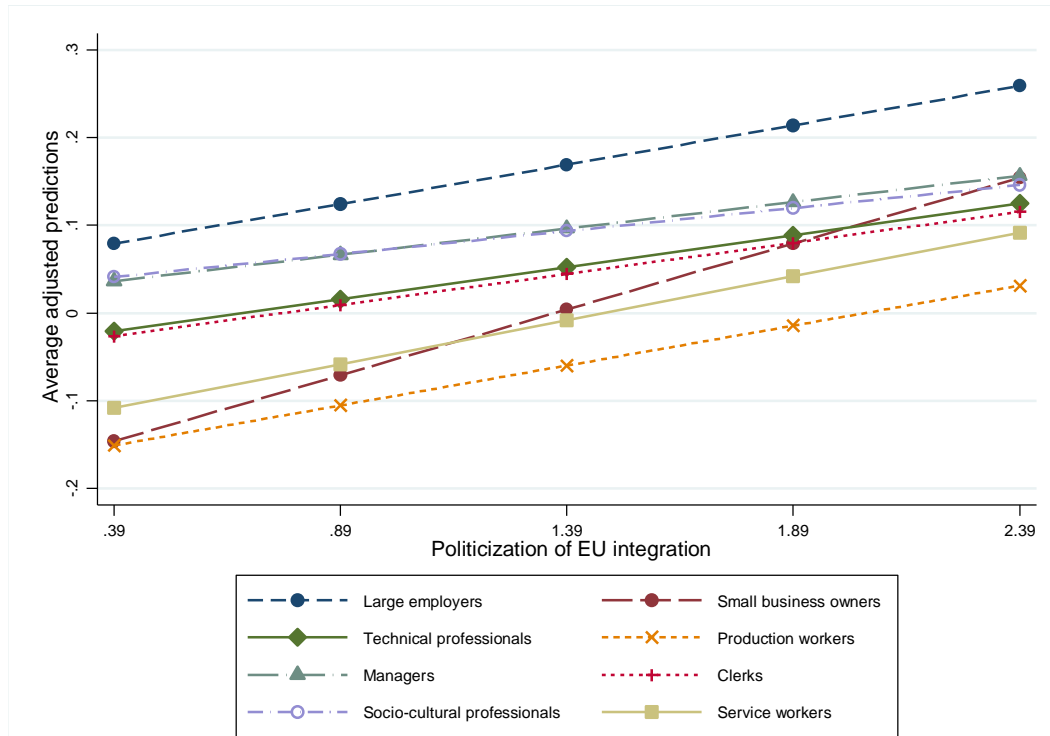
Figure 3.6 presents the same graphical representation of the interactive effect, now for tolerance towards homosexuality. These results provide further support for hypothesis 2, by showing that differences in preferences between classes are greatest at higher levels of politicization of this issue. This is again confirmed by the significant coefficients of the cross-level interactions (except for small business owners, for which, as we can see in figure 3.6, the slope is not significantly different to that of production workers). As was the case with the issue of redistribution, if we focus on horizontal differences between classes with similar levels of marketable skills, differentiation along politicization is greater among workers than among

**Figure 3.6: Average adjusted predictions of tolerance towards homosexuality across occupational classes for different levels of politicization of this issue**



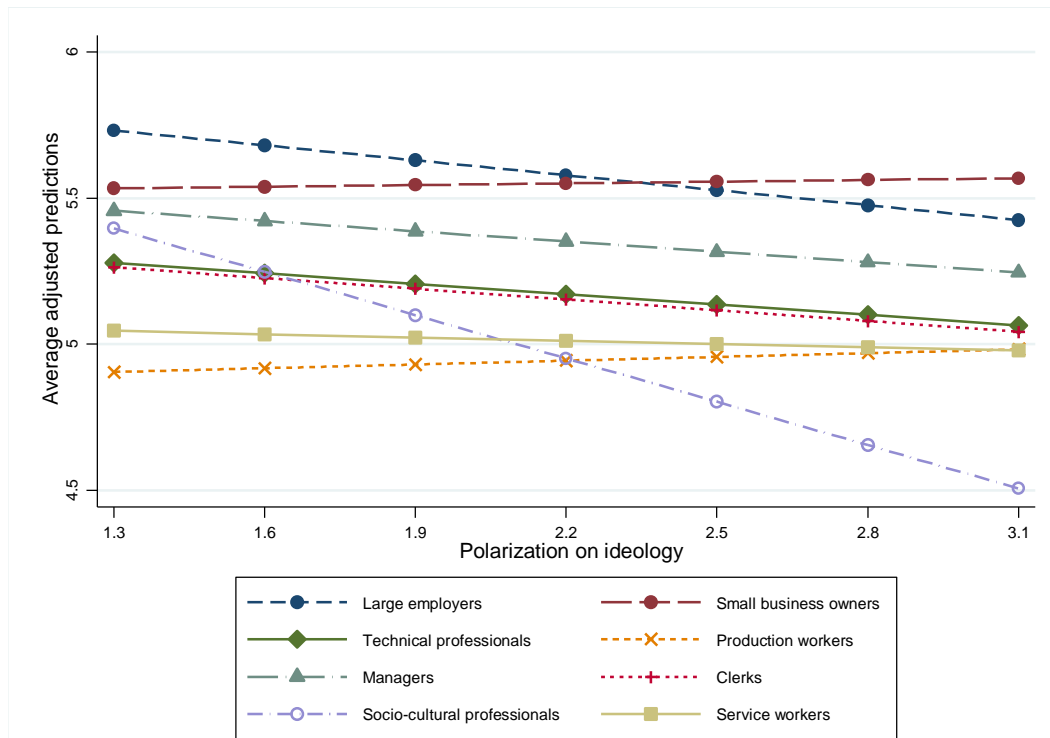
professionals. As a matter of fact, although the latter classes display greater tolerance as politicization increases, the differences in preferences between them (managers, technical professionals and socio-cultural professionals) are stable irrespective of the level of politicization of this issue. They consistently appear as more supportive of the rights of gays and lesbians, although less so than self-employed professionals and large employers who hold the most extreme position on this end of the scale. Office clerks, production and service workers, in contrast, appear increasingly different from each other in contexts of greater politicization. Office clerks display an association between preferences and politicization that is very close to the professional classes, with a positive slope that indicates that this class is more tolerant towards homosexuality under greater politicization of the issue. Service workers also display a (more moderately) positive slope. Whereas for the lowest levels of politicization, service workers are closest to production workers in terms of preferences, this changes under greatest politicization, where service workers grow apart from production workers, and small business owners appear as the class closest to production workers.

**Figure 3.7: Average adjusted predictions of preferences over EU integration across occupational classes for different levels of politicization of this issue**



The last issue to be considered before we analyze ideological placement is European integration, which is presented in Figure 3.7. In this case, there is no consistent association between the extent to which classes differ in terms of preferences and the politicization of the EU integration issue. Hence, these results do not lend support for hypothesis 2. This is also manifested in the coefficients for the cross-level interactive terms presented in Model 4 in Appendix 3.B which are all very similar and all of which, except for the coefficient comparing the impact of politicization between production workers (the reference category) and small business owners, are not significant at conventional levels. As summarized in Figure 3.7 the differences between occupational classes are quite stable along varying levels of politicization of the issue of European integration. On this issue, production workers appear as the class most opposed to integration while self-employed professionals and large employers are the most supportive. Small business owners are the group for which we observe greater variation in positioning along politicization, they hold preferences close to production workers under low politicization, but close to the middle classes when politicization is greatest.

**Figure 3.8: Average adjusted predictions of ideology across occupational classes for different levels of polarization of the ideological conflict**



Finally, figure 3.8 summarizes the predicted left-right ideology of the different classes along varying levels of polarization of the ideological conflict. These results do not lend support to hypothesis 1. In fact, and contrary to our expectation, if we concentrate on the horizontal differences between classes of similar skill level we find that low- and unskilled workers place themselves more similarly in terms of ideology when the level of polarization of the ideological conflict is highest. For professional employees, however, we find a different pattern because these classes do appear most different under highest levels of polarization of the ideological conflict. This is, however, mostly due to the trend shown by socio-cultural professionals. This class is positioned close to the other middle classes under low polarization, but occupies increasingly left-wing positions as polarization increases. In scenarios of lower polarization we find that low- and unskilled occupational classes (especially production workers) occupy the most left-wing positions. This changes in the contexts of greater polarization, where socio-cultural professionals constitute the class with the most left-wing orientation. Hence, the

ideological positioning of socio-cultural professionals appears as especially sensitive to ideological polarization.

## **Discussion**

After having observed, in chapter 2, that occupational classes differed in preferences on policy issues and in their left-right ideology, this chapter proposed that these class differences could be context-dependent. Specifically, I combined the insights from the literature considering the relevance of the electoral supply in class politics and from accounts in political psychology about the role of parties for public opinion formation to propose that class differences in preferences could depend on the extent to which parties politicize different policy issues.

The results of the analyses conducted in this chapter indicate that, for most issues, the partisan supply moderates the association between class and preferences. For the issues of redistribution, immigration and tolerance towards homosexuality we find, indeed, that the differences in preferences between classes are largest in contexts where politicization is high. These issues portray a fanning out effect that matches the pattern hypothesized in the left panel of figure 3.1. As politicization increases class differences in preferences become larger, but there are some classes which continue to hold moderate preferences. Hence, not all classes become more extreme in their preferences under greater politicization. The variation in the intercepts for the different classes indicates how much classes differ in their preferences under the minimum degree of politicization of a given issue. These baseline differences are larger for preferences over redistribution, which is consistent with social class being a more direct measure of economic risks and prospects. In comparison, class differences on the issue of immigration are smaller under low politicization (if we disregard self-employed professionals who diverge from all other classes). Thus, immigration can be potentially class divisive when politicization is high, but it is not when politicization is low.

However, we also find that our expectation about the impact of politicization is not confirmed for all policy issues. The moderating impact of the supply side is not confirmed for the issue of European integration nor for ideology. On European integration, we may conjecture that the absence of a moderating role of politicization may be grounded in the lower overall politicization of this issue (figure 3.2). Moreover, this issue is not only, on average, less politicized, but the variance in politicization across countries is also smaller than for other issues. The reason behind this lower politicization of EU integration could be that mainstream

parties have tended to converge on pro-EU positions, and thus any politicization of this issue could come from minor parties, which (if not holding a seat in parliament) have been excluded from the computation of politicization. Replicating these analyses with more recent data could return different results, since EU integration has become a more salient and divisive issue in many countries over the last years (Hutter & Grande, 2014; Kriesi & Grande, 2015).

For ideological self-placement it is rather surprising to not find increasing class differences under higher polarization, especially if we take into account that we find these trends on specific policy issues. The only occupational class that appears as particularly sensitive to the ideological configuration of the supply side are socio-cultural professionals, who hold a moderate ideological position under low polarization (to the right of workers but left of other middle classes) but are increasingly left-wing under higher polarization. As a dimension that subsumes other issues we would expect that the differences on specific policy preferences would be reflected on ideology. There are however three potential explanations for why this might not be the case. First, not all occupational classes may be equally ideological, that is, because of differences in skills and resources between classes, we could find that the association between ideology and specific issue preferences is not equally strong across the class structure. I find some evidence in favor of this claim in additional analyses that I do not present here. In those analyses, I study how preferences on specific issues are associated with ideology for the different occupational classes. The results of these analyses show that the professional classes display a greater association between specific issue preferences and ideological self-placement (even when controlling for additional third variables like education). Finding that preferences are not equally strongly associated with ideology could justify why we do not observe the same pattern in ideology as we do in specific issues. Secondly, since political conflict appears to be multidimensional in post-industrial societies, the ideological left-right dimension, although understood as capturing mostly the economic conflict, could also be encompassing elements of the cultural dimension. Moreover, this embedment of specific issues on the ideological left-right conflict could vary by countries. This would also dilute the extent to which we observe the same pattern for issues and ideology. Thirdly, this could also be partially due to the difference in the operationalization of the supply side. For specific issues politicization is operationalized by combining polarization and salience, while for ideology we only have information on polarization.

Taken together, the results from the analyses above suggest that, as Evans and De Graaf (2013a) have argued, political choice does matter. It matters, however, not only for party choice



but also for public opinion formation and the extent to which social class will ground distinct policy preferences. Under greater politicization, which means that the issues are more salient in parties' discourse and that parties take polarized positions on them, social classes differ more in terms of their preferences. Political parties are some of the main actors articulating political conflict. As their stances and positions become more politicized, they send clearer signals to the electorate, thus reducing information costs and facilitating the translation of predispositions into policy choice. As these results show, occupational classes will differ more politically where issues associated with different class interests are more salient and polarized. If the partisan supply matters not only for party choice and actual electoral behavior, but also for the degree to which class will structure preferences, then party convergence should have even stronger implications for the decline in class voting, since it would operate at two levels, in the association between class and preferences, and in the association between preferences and vote.

Besides providing evidence in favor of the moderating role of the supply side in the process of opinion formation, the results presented in this chapter also have implications for the overall shape of class voting in post-industrial societies. Across the different issue preferences considered, the largest differences between occupational classes appear under the highest politicization of the immigration issue. But, at the same time, when the politicization of the immigration issue is very low, the differences between classes are slim. It is for this specific issue that we observe the greatest variation in class preferences along the politicization axis. It is potentially class divisive, but only in contexts of great politicization. On the issue of redistribution, at maximum politicization the largest difference between classes (production workers and large employers) is smaller than in the case of immigration, although still sizeable. Compared to immigration, on redistribution class differences are greater also under very low politicization, especially for the comparison between professional classes and workers. This could be due to social class being a more direct measure of economic situation and prospects. Lastly, it is also important to note that, although absolute class differences increase along politicization, the relative positions of classes are stable. That is, overall, the relative ordering of classes according to their preferences (to more favorable to more opposed) is generally the same, independent of the level of politicization, which indicates that classes are similarly associated with preferences (in terms of direction of the association) across different political contexts. The only big exception to this pattern is found for socio-cultural professionals on the ideological dimension: while under low politicization they are located to the right of technical

professionals and the low- and unskilled worker classes, under high politicization they are located to the left of all other occupational classes.

The interactive models also indicate that different coalitions of occupational classes are possible under varying configurations of the supply side. Moreover, certain class coalitions may become increasingly unlikely if other issues get politicized. To illustrate this with an example, a coalition between socio-cultural professionals and production and service workers is likely with low levels of politicization of the cultural issues of immigration and rights of homosexuals and medium (or even high) levels of politicization of the redistributive conflict, since even under great politicization of economic issues socio-cultural professionals are closer to workers than to other professional classes. However, under increasing salience of the cultural issues this would become an unlikely coalition, since in those contexts socio-cultural professionals and workers are on opposite poles on the immigration and homosexuality issues. We could find a parallel situation for small business owners and workers, who are similar when concerned with cultural issues, but diverge in economic preferences, especially under great politicization of this issue. The coalition between socio-cultural professionals and other professional classes is also likely under high levels of politicization of cultural issues, but not when the economy becomes politicized.

What is more interesting in light of one of the main concerns in this dissertation is that production and service workers always constitute a viable coalition, irrespective of the level of politicization of different issues. Although it is true that workers grow dissimilar under greater politicization—even more so than the professional classes which maintain similar positions in the issue of tolerance towards homosexuality and redistribution—, these classes are never located on opposed poles on any issues. They potentially constitute one single preference-based coalition that would only be at slight tension under highest levels of politicization and, even in those cases, to a lesser extent than other classes. In the next chapter, I consider whether this similarity in preferences is accordingly reflected in similarity of electoral choices.

Lastly, we need to reflect on the limitations of the current analyses. Since all models are based on cross-sectional observational data we cannot identify a causal effect of parties' actions on the association between class and vote. It could be the case that parties anticipate shifts in class differences in preferences and accordingly politicize certain issues. This would imply that it is actually differences in public opinion that explain levels of politicization of issues. As the current analyses are based on data at the party level that was measured in previous or in the

same year that the ESS was fielded, as robustness checks I perform the same analyses but restricting the sample to those rounds of the ESS that were fielded two years after the measurement point of the CHES (or even three years in some countries). These analyses (not shown) return similar results, although the moderating role of the partisan supply is weaker. These robustness checks, however, are also not ideal, since we expect the partisan supply to play a role at the time that preferences are measured, and not two years into the future. Hence, the lower moderating role in this alternative specification could be due to the time distance between the two measurement points. As additional robustness checks, I include in the multi-level models controls for socio-economic indicators at the country level, since the association between the partisan supply and preferences could be due to both the demand and supply side responding to 'objective' changes in the countries' socio-economic situation. I re-estimate the models including additional controls for economic and social conditions (such as unemployment levels, the Gini Index, the poverty rate, the number of asylum seekers, or the number of immigrants from non-EU countries entering the country). These models are available in in Models 6 to 15 in Appendix 3.C, and they indicate that the results commented above are not driven by differences in objective socio-economic conditions between countries. The partisan supply still moderates class differences in preferences (for the dependent variables where we find this moderating role) also in these models. In any case, a better test of causality could be achieved either by a study of longitudinal data in different countries, especially in periods when we observe a substantial change in the salience of different issues, or by manipulating perceptions of the politicization of the supply side in controlled experimental settings.



## **Chapter 4**

### **Class voting and the role of preferences in explaining party choice**

#### **Introduction**

In assessing the political relevance of class divisions in post-industrial societies, the preceding two chapters started by analyzing whether classes differed in their issue preferences. Taking a two-step approach to analyzing class voting, I argued that if classes are to vary in their likelihood of supporting different parties, they should first display distinct policy preferences. To account for the increasing complexity of political conflict in post-industrial societies I implemented Oesch's bi-dimensional class scheme and studied four different issues capturing preferences on the economic and the cultural dimensions of conflict. These analyses indicate that classes differ both vertically and horizontally in terms of their policy preferences, and this justifies the effort to further analyze whether this is reflected in their electoral behavior.

These earlier analyses evidence that classes hold distinct policy preferences but, when focusing specifically on the comparison between production and service workers, we find them to be relatively similar in their political orientation. Even under different configurations of the supply side, production and service workers display the potential to form a relatively homogeneous electoral coalition, located in the economically left-wing but culturally authoritarian pole. This similarity appears in spite of the substantial differences between these classes not only in the logic and setting of their work, but also in the demographic composition of their class, and in the extent to which they are subject to labor market risks.

After having considered how social class is associated with issue preferences and ideological placement, the next logical step entails analyzing how class is related to party choice and to participation in elections. As a matter of fact, most of the literature on dealignment and the 'death of class voting', or on post-industrial partisan realignment has more frequently focused on electoral behavior. As reviewed in the first chapter, much of this literature is centered on explaining increasing support for the radical right among production workers, or for left-wing parties among the middle classes. In this chapter, however, I focus again mostly on the comparison between service and production workers. Because we only found slight differences in terms of preferences between these two groups in earlier chapters, we can expect them to 'vote as a single class'. Nevertheless, because political predispositions are not directly translated into behavior, and because the literature has also indicated that there could be

differences in the levels of mobilization of these two classes, differences in party support could diverge from those found for preferences. Throughout this dissertation, I conceive class voting as the propensity of individuals in a given class to vote as one, that is, I do not impose that certain classes should support specific parties for class voting to take place. When studying class voting we should, however, also consider the possibility of class non-voting. Certain classes might not be characterized by supporting a specific party but instead by having a greater propensity to abstain from electoral participation. No analysis of electoral choice is complete if it does not consider electoral abstention as an alternative available to voters.

The results in this chapter provide evidence in favor of the realignment hypothesis. Although the differences between service and production workers are only minor, occupational classes do differ in their levels of support for different party families. Moreover, the configuration of classes' support for the different party families hints to two underlying conflicts that correspond to the patterns we observed in issue positioning. One axis of conflict opposes production and service workers to self-employed professionals, large employers and managers, and a second one opposes production and service workers to socio-cultural professionals.

The similar results in the analyses of issue and party preferences indicate that class differences in political behavior are probably grounded in their different policy preferences. In the second part of this chapter, I empirically assess this possibility by analyzing how distances between individuals and parties on specific issues alter the likelihood that an individual will support a given party. These further analyses contribute to our understanding of class voting in post-industrial democracies. If we saw that classes voted differently, but that this vote is not informed by issues preferences, then this would indicate that classes are not responding to parties' programmatic appeals. Studying the association between issue preferences and party choice will indicate to what extent class voting (if there is any) is of a programmatic kind. Finding that there is a clear link between preferences and voting behavior means that there is some level of programmatic, class-based voting. However, another possibility is that these programmatic linkages also differed between social classes. Certain classes' party choices could be based on programmatic appeals, while for others this might not be the case. This possibility is considered in a second step of these analyses, where the relevance of different issues in explaining party choice is allowed to vary for each class. These analyses are estimated by implementing conditional logistic models with alternative-specific variables, which include as the key explanatory variables the distance between respondents and parties on the issues of

redistribution, attitudes towards immigration, tolerance towards homosexuality and ideological placement. The results indicate that there is a substantial degree of programmatic voting, since issue distances between parties and voters are associated with the likelihood of supporting a party. However, classes differ in the weight they place on different issues, while for some classes the distance to parties on cultural issues is more salient to explain party choice, for others it is the issue of redistribution that plays a larger role.

### **Theoretical background**

As reviewed at length in the first chapter, the prevalence of class voting in post-industrial societies has been a frequent subject of debate. While the class differences in ideology and in preferences on economic and cultural issues appear to refute the dealignment thesis and favor the realignment hypothesis, this chapter moves on to analyze whether class location grounds electoral behavior. Either considering a two-step approach to studying class voting or, alternatively, taking into account the three elements definition of political cleavages proposed by Bartolini and Mair (1990), the analyses of the distinctiveness of classes in terms of preferences roughly corresponded to the 'beliefs or value' base of political cleavages. The present chapter considers whether there are appreciable differences in electoral behavior, which would correspond to the 'organizational' element of political cleavages. In contrast to earlier accounts of class voting which understood it from the industrial perspective (a working class aligned with left-wing parties vs. a middle class supporting right-wing parties) the main purpose of this chapter is to assess whether occupational classes show distinct preferences for political parties (no matter which parties these are). Furthermore, as in the chapter 2, I put a special emphasis on horizontal class differences among workers.

Most of the research on the shape of realigned class voting in post-industrial societies focused on two specific social classes, production workers and socio-cultural professionals, because these two showed the most noticeable deviation from traditional industrial alignments. In the case of production workers, the main concern was to explain their rising support for populist right-wing parties, whereas in the case of socio-cultural professionals it was to explain their increasing support for left-wing parties (especially new-left parties). Studying new patterns of class-party alignments entails a certain degree of complexity because it involves considering how a greater heterogeneity in the social structure is associated with support for different party families, which, in turn, compete on more than one issue dimension. Because of this complexity, most studies have either focused on a specific class or labor-market

risk group (e.g. Houtman et al., 2008; Kriesi, 1989; Rueda, 2005) or on a specific party family (J. Evans, 2005; Kitschelt & McGann, 1995; Oesch, 2008a).

One of the class-party linkages that has received greatest attention has been the rising support for radical right parties within the working class. The support for right-wing parties among workers clearly contradicts industrial partisan alignments and indicates that a class realignment could be underway, especially as this support has remained relatively stable over time and is not confined to single country or party. This literature has indicated that radical right support among workers is mainly rooted in their culturally authoritarian preferences (Oesch, 2008a). It was initially posited that these parties benefitted from promoting a culturally authoritarian and economically liberal agenda (which came to be known as the ‘winning formula’) because it allowed them to build an electoral coalition around blue-collar workers and small business owners (Kitschelt & McGann, 1995). However, it has been recently shown that some of these parties have moderated their economic agenda to the point of even defending economic redistribution—although in the restricted form of welfare chauvinism (de Koster et al., 2012; Kitschelt, 2004; Lange, 2007).

Regarding the class distinctiveness of populist right support, it is production workers, small business owners, and to some extent service workers who show greatest predispositions to vote for these parties (Arzheimer, 2013; Bornschier & Kriesi, 2013; Oesch, 2008a). Although some studies have found a higher likelihood of voting for populist right parties among service workers, the support by this class is not as well documented as the support from production workers (Bornschier & Kriesi, 2013; Gougou & Mayer, 2013; Oesch, 2008a). Recently, the support from small business owners or the petty bourgeoisie appears to be in decline, and this constituency could be dealigning from the radical right as these parties have pursued a more redistributive (even if chauvinistic) economic agenda (Kitschelt, 2013). Lastly, it is also interesting to point out that although in some of the existing research the radical right has been portrayed as mobilizing the losers of modernization (Betz, 1994), in fact it appears that it is not the most disadvantaged and unskilled workers that tend to support this party family to a greater extent, but rather the medium-skilled production workers (Arzheimer & Carter, 2006; Bornschier & Kriesi, 2013; J. Evans, 2005). The less skilled show greater levels of electoral abstention and weaker partisan attachments. This highlights the importance of taking into account electoral abstention when studying the political correlates of class divisions.



Another indication of partisan realignment is the rising support for left-wing parties among middle-class voters (Gingrich & Häusermann, 2015; Güveli, 2006). This trend, again, contradicts some of the main assumptions about class voting in industrialized societies. Growing left-wing support is, however, not common to all professional employees but is instead concentrated among socio-cultural professionals. This finding placed great focus on assessing differences in political behavior and preferences within the middle class, and on the importance of adequately differentiating those employed in inter-personal service occupations. Different studies about this class have shown that socio-cultural professionals vote more left-wing than technocrats and managers, and that they especially tend to support new-left and green parties (Güveli, 2006; Kriesi, 1989). The support for left-wing parties within the middle class has been understood by some scholars as a sign of class dealignment, as the middle class has become increasingly split in their support for new left and old right parties, and especially, in that the support for the new left is seen not as stemming from class interests but rather as a manifestation of differences in cultural values (Inglehart, 1990). At first, the left-wing support among socio-cultural professionals was mainly explained based on their culturally libertarian preferences, and this hinted at this class placing greater importance on cultural rather than economic issues. However, as we have seen in chapter 2 this class is also characterized by more pro-redistributive economic preferences.

Although some scholars have interpreted the support for the new left within the middle class (arising in the 1980s) and the support for the radical right among production workers (arising in the 1990s) as signs of class dealignment, other scholars have interpreted this as the manifestation of a new cleavage with a solid class foundation (Kriesi, 1998; Kriesi et al., 2008; Oesch, 2013b). Chapter 2 has shown that these two occupational classes are clearly opposed in their preferences on the cultural dimension of political conflict, whereas they are relatively close to one another on the economic dimension. Because of this, we expect socio-cultural professionals and production workers to differ most in their levels of support for parties that occupy opposing positions on the cultural dimension (i.e. populist right parties and green parties). Moreover, because of their similar preferences to production workers, service workers should display similar patterns of electoral behavior. Since, among workers, office clerks appear as more culturally libertarian, support for populist right parties should be relatively more infrequent within this class, while they should also be more likely to support green parties than production and service workers. Chapter 2 also indicates that, on cultural

issues, small business owners' preferences resemble those of production workers. So we would also expect similar likelihood of supporting populist right parties.

The left-wing turn of socio-cultural professionals has not only constituted a base of support for new left parties but it has also been associated with a greater support for social-democratic parties. Together with the right-wing turn taken by production workers, we find that these two shifts have fundamentally altered the electoral base of the social democrats. Research on the supply side of electoral politics has addressed the programmatic shift of some social democratic parties towards Third Way politics as an attempt to cater to middle-class voters and extend their support beyond their traditional blue-collar base (for an overview see Keman, 2011). Although some social democratic parties (like the British Labour or the German SPD) did shift towards a Third Way agenda, this is not necessarily a generalized trend in Europe, as some parties have remained more faithful to their economically left-wing agenda (Keman, 2011; Rennwald & Evans, 2014). In spite of this diversity in parties' strategies, there is a somewhat generalized trend across European countries of social democratic parties losing support from production workers while gaining it from socio-cultural professionals and skilled service workers (Gingrich & Häusermann, 2015), which could become the new core constituency of these parties.

As a counterpart to the greater propensity among socio-cultural professionals to vote for left-wing parties, we expect that mainstream right-wing parties (like conservative or liberal parties) will have lost support from this section of the middle class. In fact, socio-cultural professionals show below-average levels of support for the mainstream right in Britain, Germany and Switzerland (Oesch, 2008b). Moreover, it appears that this type of parties could also be benefitting from increasing cross-class support, as they have shifted to positions more supportive of the welfare state, and attracted greater support among workers (Gingrich & Häusermann, 2015).

While the support for populist right and new left parties has been explained by focusing mostly on the cultural dimension of conflict, the opposition between the support for social democratic parties and mainstream right (liberal or conservative) parties has been understood from the perspective of the economic conflict. The support for radical left parties (who have not followed a 'green' agenda) can also be understood as arising from this dimension of conflict (March & Mudde, 2005). Going back to the differences in preferences presented in chapter 2, on the issue of redistribution, the greatest opposition appears between production and service

workers on one pole, and self-employed professionals, large employers and managers on the other. Correspondingly, we would expect production and service workers to be the classes least likely to support mainstream right-wing parties, while self-employed professionals, large employers and managers should show the highest predispositions to vote for these parties.

Many of the accounts of differences in electoral behavior among occupational classes have focused on differences in party choice, but have not explicitly considered differential abstention by classes. Occupational classes may not just differ in terms of the parties they vote for, but also in the extent to which they participate in elections. Including electoral abstention in the potential choice set of voters is especially important when assessing differences between production and service workers. The heterogeneity within unskilled service occupations could play against the mobilization of these workers (Bernardi & Garrido, 2008). Moreover, plant size has also been related to a greater likelihood of participating in elections (Arndt & Rennwald, 2017), and this could play against the mobilization of service workers who tend to work in smaller workplaces. Thus, levels of electoral abstention are probably higher among service than production workers. In terms of the overall class structure, the vertical dimension of occupational stratification should be negatively associated with the likelihood of abstaining. In their daily jobs, higher-grade classes have greater opportunities to exercise the kind of skills that are associated with political participation, and they are also more likely to be embedded in networks with higher levels of political engagement (Brady, Verba, & Schlozman, 1995). In fact, upward social mobility has been linked to greater propensity to vote (Lahtinen et al., 2017). Lower-grade classes should, in comparison, display greater levels of abstention. Among workers, because of their frequent contact with employees of higher status, office clerks could display higher levels of participation than production and service workers (net of differences in educational achievement).

To sum up, given the insights from recent literature that has assessed new forms of class-party alignments, and taking into account the differences we found on issue preferences along Oesch's class scheme, we can formulate a series of expectations about the association between class and vote. Regarding the differences among workers, service workers should be less likely to participate in national elections than production workers. Among office clerks, in contrast, electoral abstention should be less likely than among production and service workers. Because they display similar issue preferences and ideological positioning, service and production workers should display similar patterns of electoral behavior. In comparison to other occupational classes, these two classes should be more likely to support radical right

parties (given their culturally authoritarian preferences), but also radical left and even social democratic parties (because of their preferences for economic redistribution). Office clerks, on their part, should differ from other workers in being less likely to support culturally authoritarian parties like the populist right and, at the same time, more likely to support culturally libertarian parties like the new left or green parties. Moreover, they should also be slightly more likely to support conservative economic parties since this group also showed lower preferences for redistribution. In other words, this class should be closer in their party preferences to the professional classes.

Considering more generally the whole occupational structure, we can expect to find two patterns of class opposition in the likelihood of supporting different party families: one based on the positioning of classes in the cultural conflict and another one based on the economic conflict. On the first dimension, production workers and socio-cultural professionals should display opposed positions in their likelihood to vote for culturally libertarian or authoritarian parties. Therefore, we expect to find the greatest differences between these two classes in their likelihood of supporting radical right and green parties. On the second dimension, production workers should differ most from large employers and managers in their likelihood of voting economically left-wing and right-wing parties. Thus, we expect to find these two groups at the two extremes in the likelihood of voting social-democratic or radical left, and mainstream right parties.

It must be noted that, since in this chapter I am studying electoral behavior in a merged dataset including different countries and since I group political parties into party families, we may find that the class composition of social-democratic parties appears as more diluted than we would find if we studied a single country. We know from existing literature that not all social-democratic parties have followed a Third Way and attempted to attract the support of the middle classes, but that in fact some social-democratic parties have retained the support from their working-class constituencies (Keman, 2011). Because parties from different countries are grouped together as a single party family, we may find that the class-basis of this family is less distinctive in the aggregate sample than it may actually be in specific countries. This, of course, applies for all party families, but could be more noticeable in the case of the social democrats, since there are greater differences within this family in the extent to which parties have attempted to cater to specific constituencies across countries.

***Programmatic class-party alignments? Voter-party distance as a determinant of party choice by occupational class***

After considering how occupational classes differ in their electoral behavior, the second part of this chapter proceeds to analyze whether issue preferences are associated with the likelihood of supporting a party. The expectation in the first part of this chapter is that social classes will differ in their electoral behavior because they differ in their issue preferences. In fact, when hypothesizing that the kind of class alignments we observed on cultural and economic issues would be replicated in the likelihood of supporting different parties, we are assuming that issue positioning is informing individuals' electoral choices. This assumption also frequently appears in accounts of post-industrial class realignments, when new class-party links (e.g. the decline of the left-wing working class) are explained by changes in the relative salience of the issues. In the second part of this chapter, I explicitly test to what extent the distance between parties and voters on different issues underlies the likelihood of voting for a party.

Having observed that classes differ in their policy preferences, it is relevant to establish whether these issue preferences will guide party choice. Even if classes differ in their electoral behavior, this does not necessarily entail that parties are programmatically representing the interests of their class-based constituencies. Differential probabilities of supporting party families by classes could also be the consequence of other forms of party-voters linkages, such as charismatic or clientelistic linkages (Kitschelt, 2000). Support for a given party might also be based on descriptive representation that does not necessarily entail interest representation. The nature of the link between voters and parties is relevant in the study of class politics because it is something that is frequently assumed but not explicitly analyzed. One of the justifications for studying class voting is to address potential inequalities in the representation of class-specific interests. The strength of the association between class, preferences and electoral behavior provides information about the extent to which parties are responsive and accountable to class-based interests. This association would not have any relevance if we had not observed, first, that classes do differ in their preferences.

Another contribution of these analyses is that I assess to what extent party choice is based on the distance between parties and voters on different issues and I also analyze whether social classes differ in the salience placed on different issues for explaining their party choice. As in earlier chapters, I study preferences on economic and cultural issues. Considering

different policy dimensions already provides an interesting contribution, since we might find that not all issues are equally important in grounding party choice. Recent literature has suggested that cultural issues have increasingly gained in salience (Kriesi et al., 2008), thus distance to parties on this issue could explain vote choices to a larger extent than economic redistribution. Other than issue preferences, I also account for ideology, which has been more frequently addressed in spatial models of voting. Single-country studies have indicated that both ideology and specific issues guide party choice (Mauerer, Thurner, & Debus, 2015; Thurner, 2000). Following the insights from these spatial voting models, we can hypothesize that, overall, the distance between an individual and a party on any specific issue (and on the generic left-right ideological scale) will be negatively associated with the likelihood of voting for a given party. That is, individuals should be more likely to support parties that are placed closer to them.

Besides including different issues that could ground programmatic linkages, I also study whether the weight of these different issues in explaining electoral behavior varies by class. This is tantamount to proposing that classes might differ in the importance they attribute to specific issues when deciding their vote. The existing literature on partisan realignment has come to suggest that the 'unnatural' electoral behavior of certain occupational classes, like production workers or socio-cultural professionals, is a consequence of, first, the cultural preferences of voters in these classes, and, secondly, of the cultural dimension of conflict having a more important role in explaining these voters' party choices. We can empirically address this by assessing whether closeness between parties and respondents on cultural issues is more strongly associated with the probability of voting for a party for certain classes. This differential weight of issues by class does not only inform about the relative salience that classes place on issues, but it could also point to differential levels of programmatic voting among social classes. If we find that for certain classes all issues are consistently less strongly associated with voting, this would indicate that these classes vote in a less programmatic way. This could entail that their interests are less likely to be represented by parties. Overall, we would expect lower-grade classes to display lower strength of programmatic linkages, since their disadvantaged class location is likely to be related to lower levels of political sophistication and knowledge.

Before moving on to discuss the empirical strategy implemented to assess class-based voting it is necessary to emphasize a crucial difference between the analyses at hand and other studies that have considered the relevance of policy preferences in explaining classes' electoral behavior. When assessing the salience of different issues and its impact on class voting, most of

the scholarship has studied separately the support for specific party families or the party choice of specific constituencies. In this chapter, however, I assess the overall impact of issue and ideological distance on the probability of voting for any party (not just a specific party family). That is, I assess whether distances to parties on issues and ideology guide party choice in general. As mentioned above, when studying, for instance, the support for radical right parties among workers or green parties among socio-cultural professionals, it was argued that the support for these parties was mainly grounded on cultural preferences. This, however, does not preclude that, when considering more broadly which party to support, individuals in these classes also attribute relevance to the economic dimension of conflict. The second part of this chapter, hence, considers which issues motivate different occupational classes to support any party, not a specific party family.

### **Data and methods**

The analyses in this chapter draw on data from the European Social Survey (ESS). The second part of the analyses adds information from the Chapel Hill Expert Survey (CHES) to be able to compute distances between voters and parties. In contrast to the previous chapter I do not pool ESS waves into a single dataset, but restrict the analyses to round 6 only. Moreover, as in chapter 3, I further limit the sample to include only those countries for which information from the CHES is available.<sup>29</sup> Even though only the second part of the analyses uses information from this source, I omit the countries excluded from the CHES from the first analyses to have a comparable sample. As I explain in further detail below, I implement the analyses in only one of the waves of the ESS because I cannot include country-round fixed effects in the estimation of conditional logistic models.

The dependent variable under consideration in this chapter is the party the respondent voted for in the last national election.<sup>30</sup> The operationalization of this variable is different in the first and second part of the analyses. In the first part, when considering the association between classes and vote, the dependent variable includes a response category for ‘non-voting’ for all those respondents who abstained in the last national election. To have a comparable measure of partisanship across countries, parties have been classified into six different party families:

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<sup>29</sup> The countries included in the analyses are: Belgium, Bulgaria, Switzerland, Czech Republic, Germany, Denmark, Estonia, Finland, France, United Kingdom, Hungary, Ireland, Lithuania, Netherlands, Norway, Poland, Portugal, Sweden, Slovenia and Slovakia.

<sup>30</sup> See appendix 4.A for the question wording, coding and descriptive statistics of the variables included in the analyses.

radical right, mainstream right (conservative and liberal parties), social-democratic, radical left, green and others (and the additional category for abstention). To code parties into families I followed the CHES's assignment of parties into families (by country experts). Thus, the dependent variable in the first models is a categorical variable with seven non-ordered response categories. In each country, only parties with more than 25 supporters in the ESS sample are considered. Table 4.1 summarizes the distribution of party families' support in the sample under consideration. Some party families, namely the radical right, radical left and green parties clearly have lower bases of support, not to the extent, however, that this prevents a meaningful analysis of party choice.

**Table 4.1: Support for party families in the sample**

Party family	Number of observations	Percentage
Abstention	8,802	25.53
Radical right parties	1,382	4.01
Mainstream right parties	12,230	35.48
Social democratic parties	7,087	20.56
Radical left parties	1,261	3.66
Green parties	1,096	3.18
Other parties	2,616	7.59
Total	34,474	100.00

In the second part of the analyses, which assesses the impact of distance to parties on issues on the likelihood of voting for a party, the specification of the dependent variable is different because the models are not only estimated on characteristics of the individual, but also on characteristics of the alternatives (the parties).<sup>31</sup> First, abstention cannot be included as an additional category because it is not possible to calculate the distance between voters and the vote choice 'abstention' (we cannot attribute issue positions or ideology to abstention). Second, since in this second part of the analyses the dataset is restructured into a long format (each row is now an individual-party combination), the dependent variable is not the party

<sup>31</sup> To be able to estimate these models based on case- and alternative-specific variables the dataset needs to be restructured into a stacked data matrix (or long format). In this new dataset, each row in the matrix corresponds to an alternative-individual combination, where alternative refers to each party in the country. In each country, a voter faces as many vote alternatives as there are parties competing the election (although the analyses are limited to parties included in the survey as response categories). The alternative-specific variables that these models consider are distances between parties and individuals on three different issues and on ideology. These variables are specific to each alternative since, for each individual, distance to each party will be different depending on her own location and on where that party is located.



family the respondent voted for, but rather a binary variable that indicates, for each individual, the alternative he or she voted for.

As in previous chapters in this dissertation, the key independent variable under consideration is occupational class, as coded from Oesch's class scheme. Control variables are those already included in preceding chapters: age, gender, labor-market status and trade union membership. Because the results of conditional logistic models (as with other non-linear models) are difficult to interpret, and to avoid having to interpret log-odds relative to a base category, I present the results from these analyses either as predicted probabilities (at means or representative values) or as average marginal effects on probabilities.

Modelling the probability of abstaining or voting for each of the party families requires fitting a discrete choice model. Because not all respondents face the same choice set in terms of the parties they can vote for (not all party families are represented in all countries) I implement a multinomial conditional logistic regression model which allows for varying individual alternative choice-sets (Thurner, 2000; Weber, 2011). In contrast to previous chapters, I do not include country fixed effects in the regression models because the country indicators would perfectly predict non-voting for certain party families in the countries where there is no representation for these families. However, I still study the pooled dataset of countries because this allows me to model support for certain party families that would otherwise be represented by too few individuals in single-country samples. The number of observations could be further enlarged by studying the merged dataset of ESS rounds, but this would make the absence of country-round fixed effects more problematic and, moreover, it would be too computationally demanding, especially for the second part of the chapter in which models include both alternative- and case-specific variables.

In the second part of this chapter, I focus on assessing the impact of alternative-specific variables (characteristics of the party-individual combinations) on the likelihood of supporting a party. The alternative-specific variables I consider in these analyses are the distances between respondents and parties on the issues of redistribution, immigration, tolerance towards homosexuality, and on ideology. I exclude the issue of European integration in these analyses because including more alternative-specific characteristics, and especially, the interaction between distances and class location was too demanding for the estimation of the model. I exclude this issue because, as we saw in chapter 2, class differences on this issue are more reduced and it is unclear whether it captures preferences on the economic or the cultural

dimension. Moreover, an analysis of the impact of distances on European integration (not shown) indicated that it had a minor impact, when compared to the other dimensions. The analyses in this second part are estimated on a different sample from those in the first part because all respondents who abstained in the last election are excluded from the analyses. The individual-level variables (denominated case-specific variables in the context of these models) are the same as those included in the previous models (namely, age, gender, labor-market status and trade union membership).<sup>32</sup> I then add four alternative-specific variables: distance between respondent *i* and parties *1 to J* on the ideological scale, on the issue of redistribution, on the issue of immigration, and on tolerance towards homosexuality. Parties' positions on issues, as in the previous chapter, are extracted from the CHES 2010.<sup>33</sup> Hence, all parties that are not coded as part of the CHES are also excluded from the analyses.

Because the issue preferences of voters and parties are measured on different scales, before computing distances, all measures are recoded to vary between 0 and 1 (also ideological placement). Then, differences between voters' and parties' positions are calculated as City-block distances, that is, as the absolute value of the difference between the position (measured on the 0 to 1 scale) of respondent *i* and the position of party *j* on a specific issue (for all parties *1 to J*). Thus, a value of 1 in the distance variables indicates that a respondent is as far as he can possibly be from a party (given that this is measured on a bounded scale), while a value of 0 indicates that the individual and party occupy the same position. Which is the appropriate metric when computing distances for conditional logistic regression models is a contested issue (Thurner, 2000), in the analyses at hand, computing instead squared or Euclidean distances does not fundamentally alter the results. The impact of distances on the specific issues, and on ideological placement are estimated in separate models. One model includes all three policy issues, and another one includes only ideology. Because it is not clear to what extent ideology subsumes the economic and the cultural dimension of conflict, and because this may vary by country (Inglehart & Klingemann, 1976; Kitschelt & Rehm, 2015a; Middendorp, 1992), I estimate its impact on a separate model. Nevertheless, adding all distances in the same model,

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<sup>32</sup> Case-specific variables correspond to variables that characterize the individual respondent (i.e. that are constant over a respondent, like occupational class or age) while alternative-specific variables are those that vary within the respondent for each alternative (e.g. for a German respondent: ideological distance to the SPD, ideological distance to the CDU or distance on the immigration issue to the Greens, to name a few).

<sup>33</sup> The correspondence between items in the ESS and the CHES is the same as in the previous chapter. A similar approach to merging ESS and CHES data and calculating distances has been implemented by Stecker and Tausepfund (2016) in an analysis of policy responsiveness.

or studying each of them separately in a different model does not substantially alter the overall conclusions from this chapter. Although there are differences in the absolute values of the coefficients, the relative impact of distances and their interactions with social class remain unchanged.

## **Results**

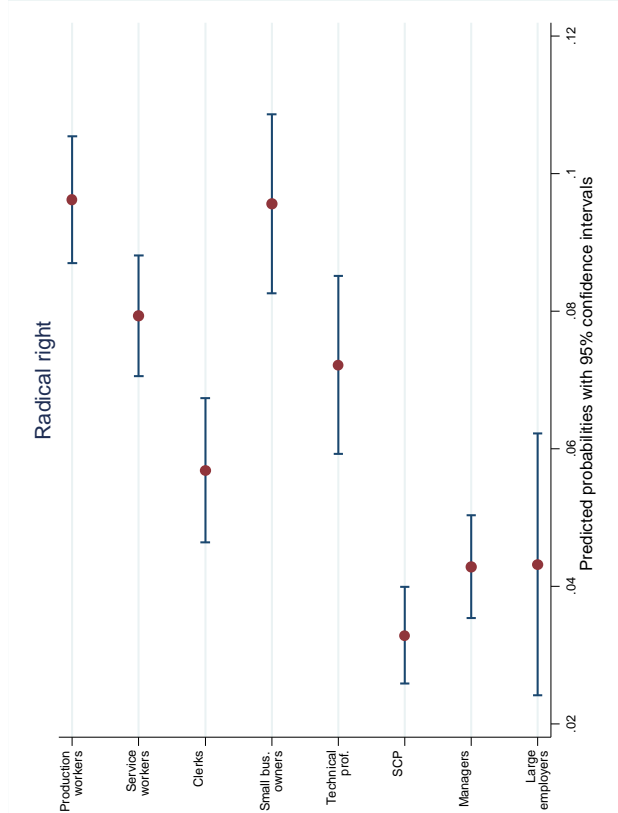
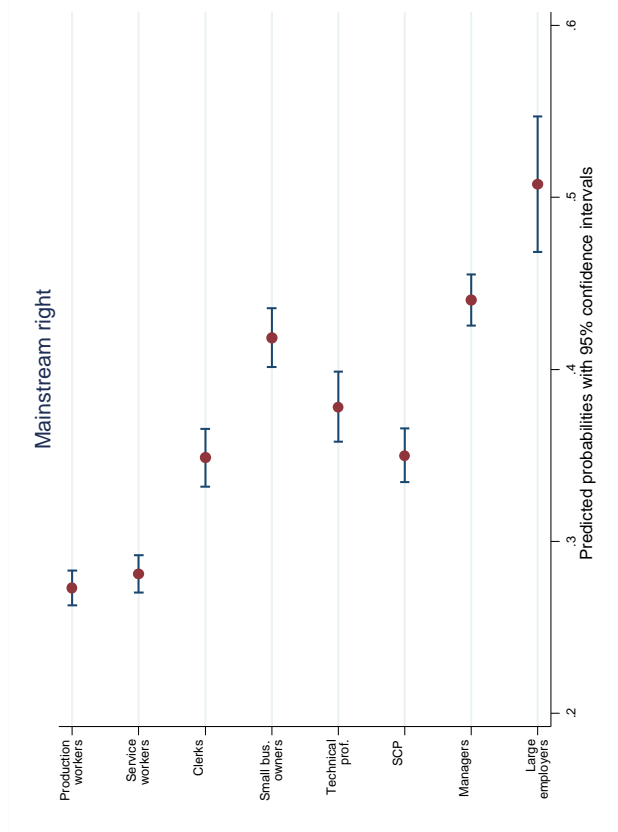
### ***Party choice by social class***

The first part of the analyses addresses how class is associated with abstention and with support for different party families. Figure 4.1 presents predicted probabilities of each class supporting each of the different party families with 95% confidence intervals around the estimates. Each panel identifies one of the outcome categories (either a party family or abstention). These predicted probabilities were estimated from conditional multinomial logistic regression models, which can be found in Appendix 4.B. These probabilities are calculated at representative values of the control variables for each of the classes. These representative or meaningful values correspond to the mean value of the control variables within each of the classes (Williams, 2012). I chose to calculate predicted preferences at these meaningful values because, as we saw in chapter 2, class location is not independently distributed from socio-demographic factors or labor-market risks, hence it would be rather artificial to set all control variables at the sample mean. Nevertheless, I have also estimated predicted probabilities holding all control variables at their sample mean (results not shown), and this does not fundamentally alter the conclusions from these analyses.<sup>34</sup> The estimates for the predicted probabilities are plotted against different scales of the x axis, depending on the party family under consideration because, as displayed in table 1, the baseline probabilities of voting for party families with a more reduced number of supporters in the sample (and the electorate in general) are naturally lower than those of larger parties.

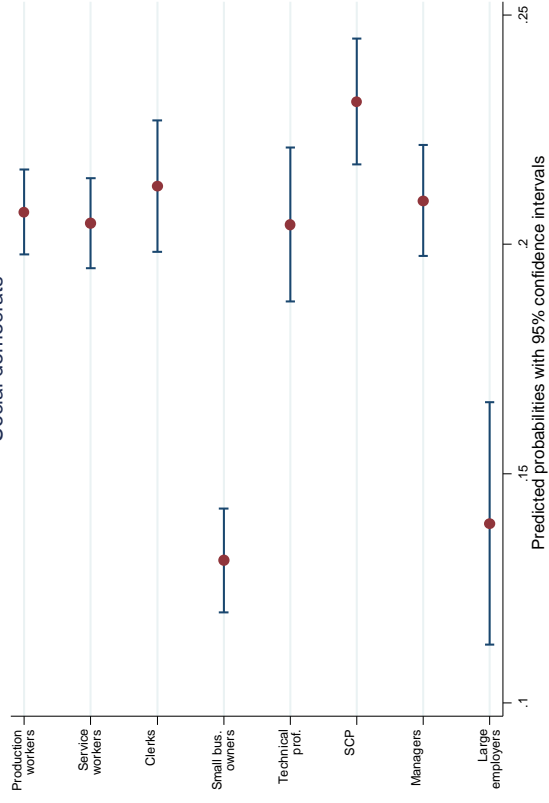
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<sup>34</sup> This alternative calculation of predicted probabilities slightly alters the absolute value of predicted probabilities, while the relative differences between classes are practically unaffected by it.

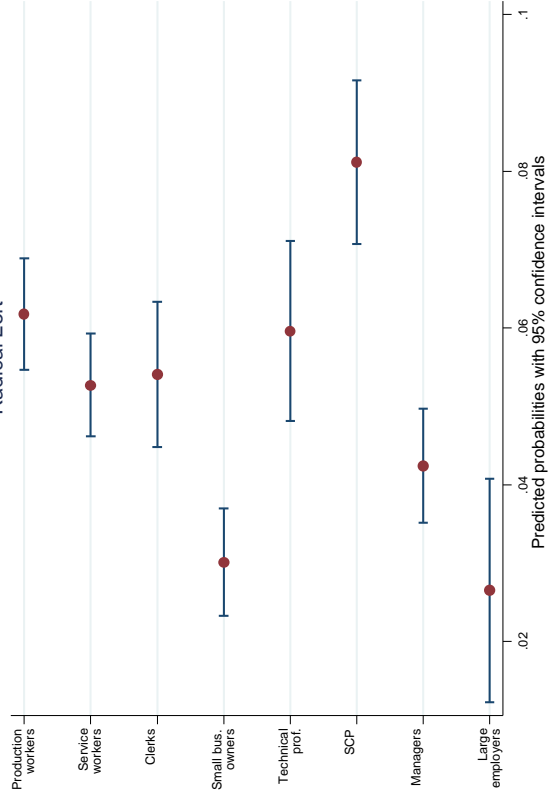
Figure 4.1: Predicted probabilities of voting for the different families for Oesch's occupational classes, at representative values of the control variables for each of the classes



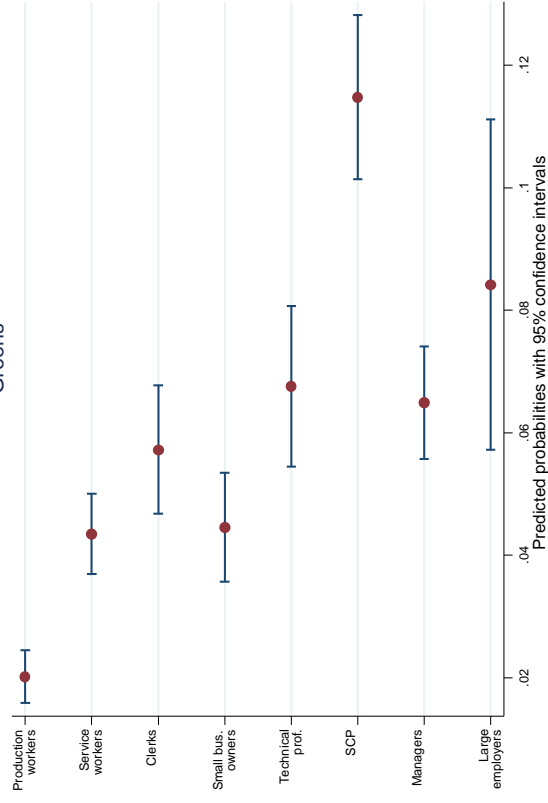
### Social democrats



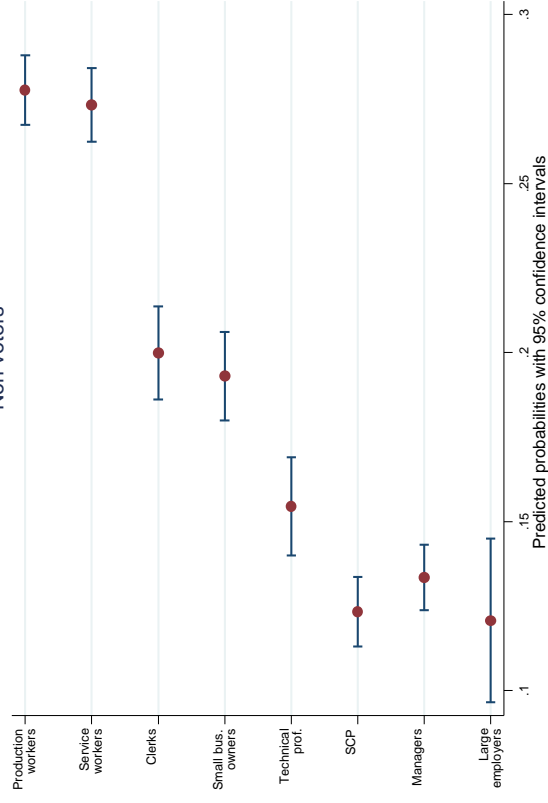
### Radical Left



### Greens



### Non voters



Starting with the comparison among workers, the different panels in figure 4.1 show, as we had anticipated given their similarity in preferences, that service and production workers display overall similar probabilities of supporting the different party families. We did, however, expect to find greater differences in their propensity to abstain from electoral participation, because the heterogeneity in service occupations and the fact that these occupations are usually in workplaces of smaller size could play against the mobilization of these workers. This is, however, disconfirmed by the analyses, where service and production workers display virtually identical probability of abstaining (0.273 and 0.278 respectively). What is notable in these results is that the probability of abstaining of production and service workers is markedly higher than that of all other classes. Comparatively, office clerks, who are also part of the lower-grade classes, are 0.08 points more likely to have participated in national elections than production and service workers. If we look at the classes displaying higher levels of participation, like socio-cultural professionals, managers, or self-employed professionals and large employers, we find that their likelihood of abstaining is less than half of the probability of abstention among workers. Production and service workers are distinctively less likely to participate in elections than all other classes. Abstention displays a clear vertical division between classes, the professional classes are more likely to have voted, while workers are more likely to have abstained (with small business owners and office clerks occupying a middle position between these two poles). This strong class profile of non-voting highlights the importance of including it as an outcome category when studying voting. If we left abstention out of the analysis, we would be neglecting relevant class disparities in electoral behavior.

Even though the differences between production and service workers are generally not large, not for all party families are they as small as for abstention. There is, in fact, some variation across the different party families. Because these two classes differed slightly more in their cultural than in their economic preferences (with service workers being more culturally libertarian) it is not surprising to find that, while their probabilities to support the mainstream right or social democratic parties are virtually indistinguishable, the differences become slightly larger when we consider support for the radical right or for green parties. In fact, production workers are (statistically significantly) more likely to vote for the radical right, and service workers are significantly more likely to vote for green parties. Still, these differences are quite small. In the probability to vote for the radical right or the greens these differences are roughly around 0.02 points, while for social democratic parties and mainstream right below 0.01 points.

If we establish the comparison between workers and office clerks, we find that the electoral choices of these groups are more distinct. Office clerks are less likely to abstain from voting, and they also show considerable variation from workers' behavior in their support for radical right, mainstream right, and green parties. As I expected based on how they differed from production and service workers in terms of issue preferences (office clerks appeared relatively more culturally libertarian and less favorable towards redistribution), they are accordingly less likely to support radical right parties, and more likely to support the mainstream right and green parties. In the probability of supporting social democratic and radical left parties, however, this class does not significantly differ from production and service workers.

Shifting the attention from lower-grade classes to the whole class structure, the panels in figure 4.1 indicate that we do find different patterns of class alignments depending on the specific party family we consider (in line the arguments from the realignment framework), and that the class distinctiveness of parties' constituencies also varies by family. In line with the proposition from the partisan realignment literature, electoral behavior partly mirrors the conflicts we identified in chapter 2. Production workers and socio-cultural professionals are positioned at opposed ends in the probability of voting for parties that have been characterized by mobilizing their constituencies mainly on cultural issues: radical right and green parties. While also managers and self-employed professionals and large employers are unlikely to vote for the radical right, in the support for green parties we see a clearer distancing of socio-cultural professionals from the other middle classes. Socio-cultural professionals constitute the class least likely to support the radical right (with a predicted probability of 0.033) while production workers and small business owners are located at the other end, showing the highest probability of voting for this party family (0.096 for both). In the probability of voting for green parties we see an even clearer opposition between production workers and socio-cultural professionals, who are located at opposed extremes and more distant from other classes. Even though, in chapter 2, we found technical professionals to be more culturally authoritarian than managers, this is not reflected in a differential probability of supporting green parties between these two classes. Technical professionals are, however, more likely to support the radical right.

Apart from electoral abstention, the outcome categories for which we observe a clearer class-gradient are the mainstream right, green parties and also the radical right. We have already discussed the support for the latter two, which appears to be related to the cultural dimension of conflict. In the case of the mainstream right, however, we find that

predicted support for this family aligns with differences in economic preferences about redistribution. For large employers and self-employed professionals the probability of voting for this family is over 0.50 (overall predicted probabilities of voting for the mainstream right are larger because the baseline probability of supporting this family is higher in the sample). Large employers are followed by managers and small business owners, with probabilities over 0.4 of voting for these parties. While clerks, technical and socio-cultural professionals display medium levels of support for this family, production and service workers (the classes most supportive of redistribution) are the least likely to vote for the mainstream right. Support for this party family hence parallels vertical class divisions as well as relative class positions on the economic dimension of political conflict.

Predicted probabilities of supporting social democratic parties display a more diffuse class profile. As a matter of fact, only two occupational classes display markedly different probabilities compared to the whole occupational structure: small business owners and self-employed professionals and large employers, which are less likely to support the social democrats. All other occupational classes display a similar propensity to support this party family, with the predicted probability for socio-cultural professionals being larger than for the other classes. Neither production, nor service workers display a distinct pattern of support for this party family. Thus, these results would appear to support the argument that social democrats have increasingly catered to the middle classes, while diluting their specific working-class profile. As I mentioned above, it is possible that the class profile of social democratic parties is further diluted in these analyses that pool together parties from different countries. According to the literature, some of these parties have followed a Third Way and attempted to attract middle-class support, while others have maintained workers' votes. Hence, studying them together might entail that the aggregate class profile of this party family in the pooled sample is more diffuse than it actually is for individual countries.

Rather surprisingly, the analyses do not display such a clear class profile in the support for the radical left, not even in the comparison between the professional and workers' classes. Although we would expect this family to find greater support among workers, it is socio-cultural professionals who are most likely to support the radical left. This could be due to radical left parties adopting positions close to the new left agenda. Production workers, on their part, are more likely to support this family than service workers, which could indicate some differences in the traditional mobilization of workers by the left. However, this difference is quite small. In fact, production workers are only slightly more likely of supporting the radical left than clerks or technical professionals,



which is surprising since we found greater differences on economic preferences between these classes. In line with their positioning on economic issues, small business owners, and large employers and self-employed professionals appear as the classes least likely to vote radical left, followed by managers.

Overall, differences in electoral behavior between classes show that there still is a class profile in the support for many of these party families and, also, that there has been a realignment of the partisanship of different classes. While the support for some parties (like the radical right, or green parties) evidences the opposed location of production workers and socio-cultural professionals on cultural issues, similar levels of support for other parties (like the radical left, social democrats, or even mainstream right parties) parallel their similarity in economic preferences. At the same time, production workers often stand in clear opposition to self-employed professionals and large employers (in the support for social democratic parties, the mainstream right or the radical left), hence reflecting the divergence between these constituencies on economic issues. Incorporating abstention as a possible form of electoral behavior revealed substantial class disparities in electoral participation. Indeed, there is a clear class gradient to electoral abstention, with production and service workers being particularly unlikely to have voted in national elections.

Lastly, it is also interesting to highlight the absence of substantial differences in terms of party support or abstention between production and service workers. Even in figure 4.1 which displays predicted probabilities at meaningful values (which took into consideration that the two classes display distinct socio-demographic profiles) both classes show very similar patterns of partisan support and abstention. This indicates that, in spite of some slight differences (in the probability of voting radical right, left and green parties) these two occupational classes are mobilized to a similar extent and support the same party families. This points, again, to a relatively unified working class, composed of both production and service workers.

As discussed in chapter 2, some recent literature has argued that, especially on cultural issues, educational attainment could play a more important role than social class in explaining variation in preferences (Ivarsflaten & Stubager, 2013). The results of that chapter indicated that education was more strongly related to preferences on issues related to the cultural dimension (such as immigration or tolerance towards homosexuality), while the association between education and preferences over economic redistribution was weaker. Given these results we can expect that, in the case of party choice, educational attainment will play a larger role in explaining support for party families that place a greater focus on the cultural dimension (mainly radical right and green parties). Appendix 4.D

summarizes the odds ratios obtained from a multinomial logistic regression model including both occupational class and educational attainment as explanatory variables. Each column corresponds to the odds of voting for a specific party family instead of abstaining, which is set as the baseline response category. Comparing first the outcome of voting for a radical right party instead of abstaining, we find that variation based on educational attainment is comparable in size to variation due to occupational class. We find a positive effect of education for two of the middle levels of education. The odds of having voted for the radical right versus having abstained increase by 1.300 times for respondents who have finished lower secondary education and by 1.151 times for those with upper secondary education—always in comparison to those who did not finish lower secondary education. This positive effect of middle levels of education (in comparison to the lowest) is in line with earlier research that indicated that support for the radical right is not highest among the most disadvantaged, but rather among those with middle levels of educational attainment (Bornschiefer & Kriesi, 2013). Having completed tertiary education, on the contrary, decreases the odds of having voted for the radical right instead of having abstained. Moreover, the odds ratio associated to the comparison between the two extreme levels of education is marginally larger than the odds ratio between production workers and socio-cultural professionals.

We find that differences in the likelihood of supporting a party family based on educational attainment are larger in the case of mainstream right and social-democratic parties than in the case of the radical right. These larger differences appear mostly in the comparison between the least and the most educated respondents in the sample. In all these cases, it is important to take into account that the comparison is established with reference to abstention, hence it is not surprising to find that education plays an important role in mobilizing individuals to vote instead of abstaining. We find the strongest association between educational attainment and party support in the case of green parties. Having completed tertiary education (against not having completed lower secondary education) increases the odds of voting for a green party versus abstaining by 17.602 times, which is much larger than any differences we observe in terms of class location. Even when comparing lower levels of education (like post-secondary non-tertiary), the association between educational attainment and voting for a green party is much stronger than for any of the comparisons based on occupational class. The strength of this association is probably due to the comparison being established between green parties and abstention, since it is for these two outcomes that we expect the greatest impact of education. While lower levels of educational attainment have been frequently associated to lower participation in

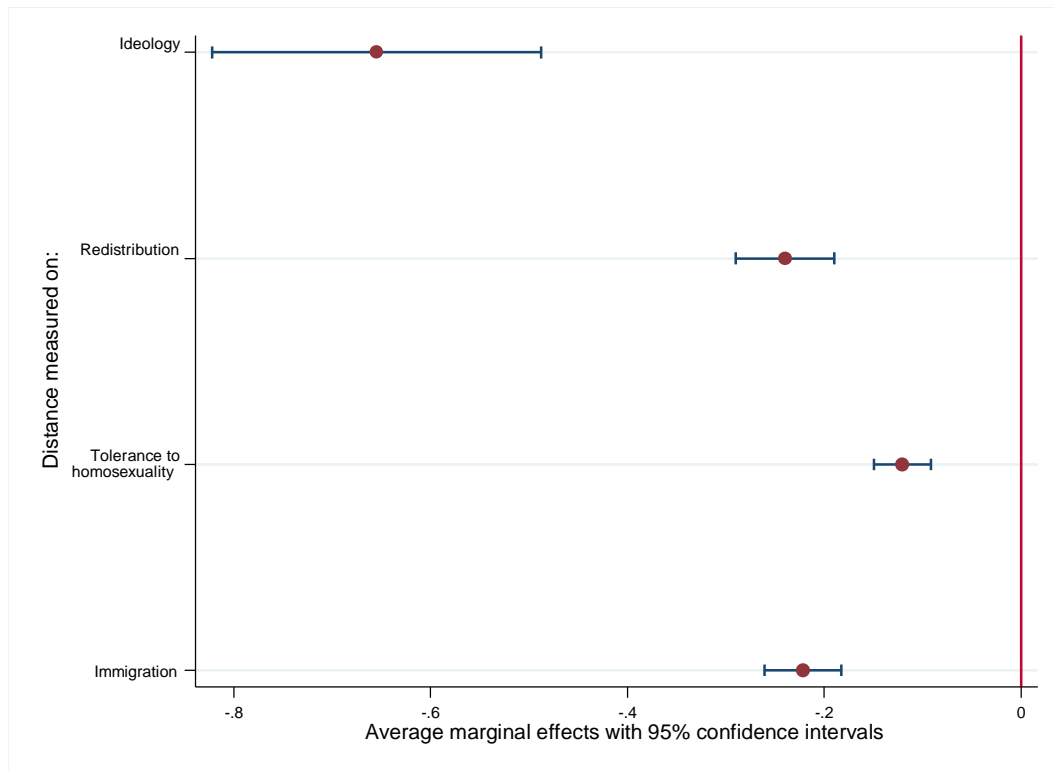
elections, supporters of green parties have been characterized as being particularly highly educated (Kriesi, 2010).

### ***The relevance of issue preferences and ideology for party choice***

The results of the previous analyses indicated that classes differ in their average likelihood of supporting different party families but also that the class distinctiveness of parties' constituencies depends on the specific party family under consideration. Moreover, class similarities and disparities in electoral behavior resemble the patterns found for issue preferences and ideology. This would indicate that class preferences ground their differential levels of party support. The next analyses provide a more direct test of this association between preferences and voting. As I mentioned above, this association is consequential for whether class-party linkages are programmatic. If issue preferences are unrelated to party support, this could imply that, even if classes display distinct party preferences, it is unlikely that parties will be responsive to class interests. The link between parties and classes could instead be based on a different form of representation. Implicitly, most of the literature on partisan realignment has assumed some degree of programmatic linkage between constituencies and parties. After all, explanations of changes in party alignments based on the shifting salience and content of the dimensions of political conflict are assuming that issues are consequential for parties' competition and how they cater to specific constituencies. Not finding an association between issue preferences and the likelihood of supporting a party would not completely rule out the possibility of programmatic voting on other issues not considered in these analyses. However, the preferences here included, especially those on the issue of redistribution and immigration, have been repeatedly referred to as some of the crucial elements in the economic and cultural dimensions of political conflict. The first analyses address how distances between voters and parties on different issues are related to the likelihood of voting for that party. This is a generic model estimated for all voters in the sample, where the impact of distances is constrained to be the same for all social classes. Later models acknowledge the possibility that classes may differ in the salience they attribute to issues of different nature.

Because conditional logistic regression coefficients are not directly interpretable I present average marginal effects to summarize the results from these models. Figure 4.2 presents the results from the generic model. While the impact of distances on the issue of redistribution, immigration and tolerance towards homosexuality are estimated in the same model, that of distance on the ideological scale is estimated separately. The coefficients for the average marginal effects indicate how the probability of voting for a party changes when distance between the party and the respondent changes from the

**Figure 4.2: Average marginal effect of distance on the different issue dimensions and ideology on the probability of supporting a party**



minimum distance 0 (i.e. the party and the respondent occupy the same issue position) to the maximum distance 1 (i.e. the party and the respondent are positioned at opposite extremes of the issue scale).

In line with earlier research, all distance variables are negatively related to the probability of supporting a party. In other words, the larger the distance between the respondent and a party on either of the three issues or on the ideological scale, the lower the probability that the respondent will support the party. However, the strength of the association between distance and voting is not the same across all items. It is stronger for ideology than for the other three issues. When the distance between the respondent and the party changes from the minimum to the maximum on the ideological scale, the probability of supporting that party decreases by about 0.65 points. Meanwhile, a similar change in distance on the issue of immigration reduces the probability of supporting the party by 0.22 points. The impact is similar for the issue of redistribution (0.24 points), whereas it is the weakest for the issue of tolerance towards homosexuality. On this issue, increasing the distance between the party and the voter from the minimum to the maximum decreases the probability of voting a party by 0.12 points. It is not surprising to find the association to be

strongest for ideological placement, since the ideological scale can potentially subsume many different issues that we cannot directly measure in our model.

In the estimations on which figure 4.2 is based, distances on any specific issue are constrained to have the same impact for all voters. Changes in the distance to a party on any specific issue will be associated with the same change in the likelihood of supporting that party for all individuals. This presupposes homogeneity in how different individuals respond to distance to parties. However, this might be too strong a constraint, because not all individuals may be equally likely to base their vote on the same issues (and on the distance to parties on them). As a matter of fact, we can expect that some classes will place greater weight on particular issues. For instance, the literature has indicated that socio-cultural professionals will place greater relevance on cultural issues. Besides the differential weight placed on issues by different classes, we could also find variation in how 'programmatic' different classes are. Voter-party linkages can take on different forms, and some classes could place lower relevance on the specific issue positions taken by parties. For example, charismatic leadership has been frequently mentioned as one of the factors contributing to the rise of the radical right, sometimes referring especially to its attractiveness for low-skilled voters.<sup>35</sup> Hence, to relax the constraint of equal impact of distance for all occupational classes I introduce interactive terms between occupational class and the four distance measures. These interactions identify class-specific issue saliency weights, also referred to as taste heterogeneity in the context of conditional logistic models (Hensher, Rose, & Greene, 2015; Thurner, 2000).

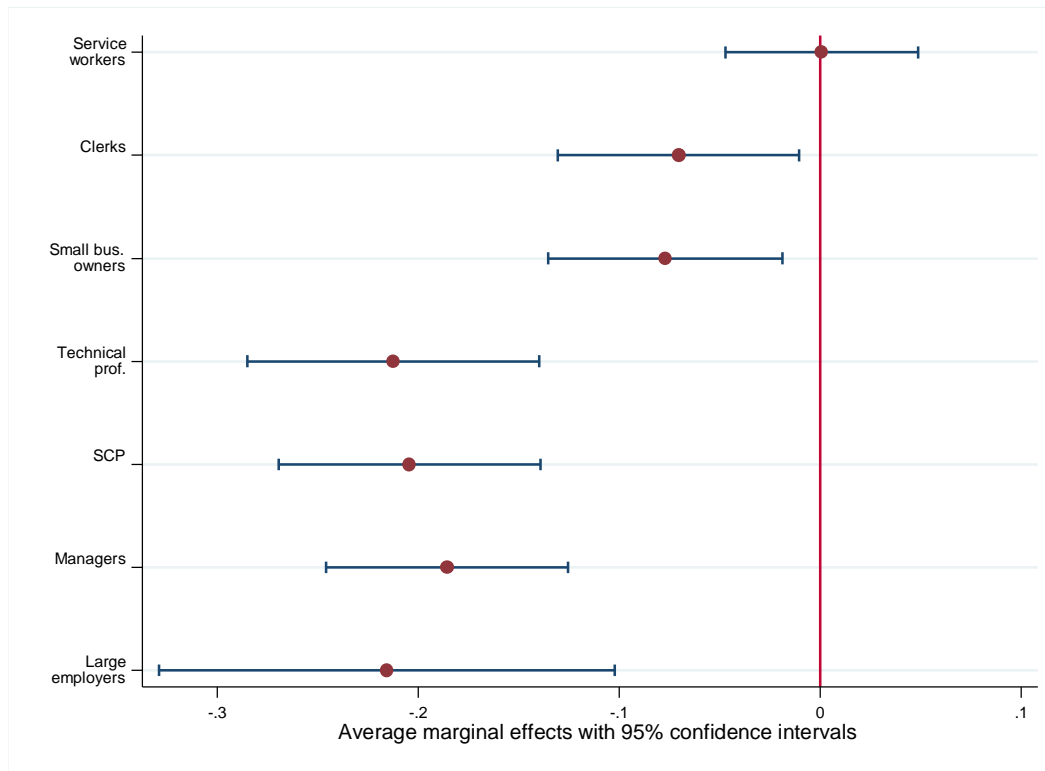
As in earlier analyses, production workers are set as the reference category, thus the interactive coefficients indicate how the impact of distances on each of the issues for the seven other occupational classes differs from that for production workers (which is captured by the main effect of the distance variables). The interactions with each of the distance items are included in separate models but always introducing distances on other items as controls (in the case of the issues, but not when estimating interactions with ideology which is estimated in a separate model without controls for issues). The results from these specifications indicate that, indeed, occupational classes differ in the weight they attribute to different issues when deciding their vote. Furthermore, some of the results run counter to what we would expect according to the existing literature.

Starting with ideology, figure 4.3 displays average marginal effects of how the weight that classes attribute to distances to parties on the left-right scale differs with

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<sup>35</sup> For a review of charismatic leadership in populist parties in Europe see Pappas (2016).

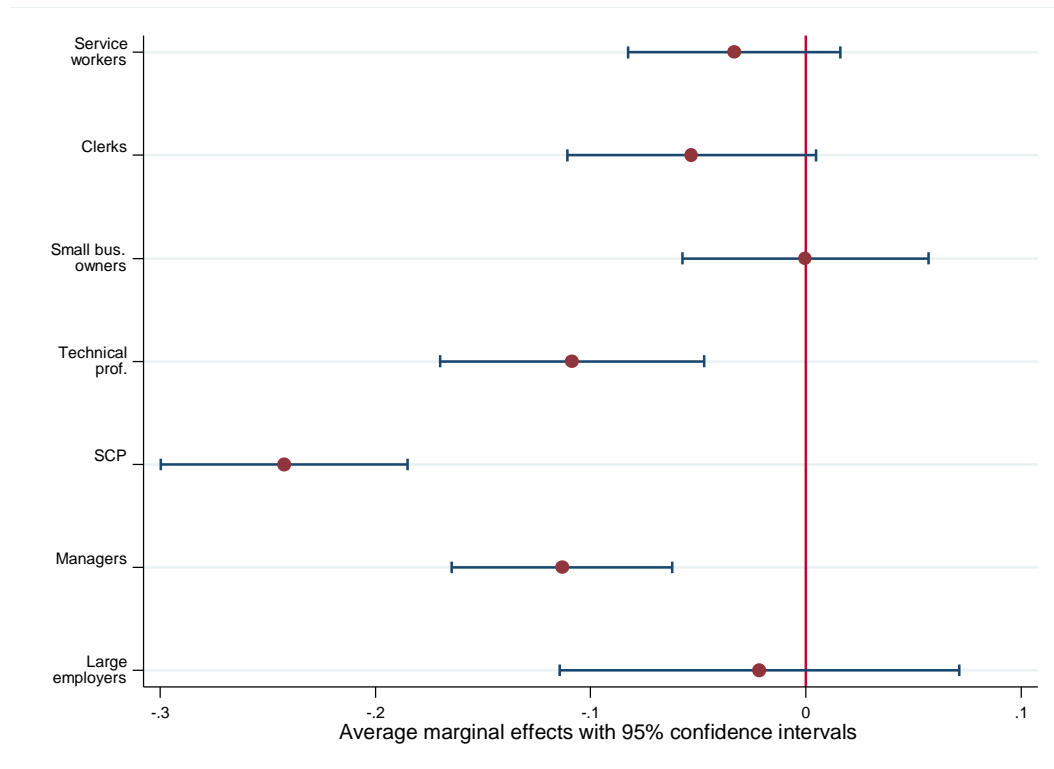
**Figure 4.3: Heterogeneity in the association between party choice and distance on ideology for all occupational classes vs. production workers**



respect to the weight attributed by production workers. Distance on the ideological scale does have a statistically significant negative impact on the probability of production workers supporting a party. As indicated by the average marginal effect of the constitutive term for ideological distance presented in Appendix 4.D, when distance on ideology increases from the minimum to the maximum, production workers' likelihood of supporting that party decreases by 0.573 points.<sup>36</sup> However, this distance has a stronger impact on other classes' vote choice. Specifically, the higher-grade classes display a more ideological profile in their party choice. Self-employed professionals and large employers, for instance, are an extra 0.22 points less likely than production workers to support a party that is furthest from them than a party that occupies their exact same ideological position. This additional impact of ideological distance represents 0.21 points for technical professionals, 0.20 points for socio-cultural professionals, and 0.19 points for managers. The class differences we observe in the relative weight of ideological distance are along the vertical rather than horizontal dimension of stratification. Ideological distance has virtually the same impact in the electoral choice of service workers and production workers. Office clerks

<sup>36</sup> The regression coefficients for all alternative-specific variables are presented in Appendix 4.C.

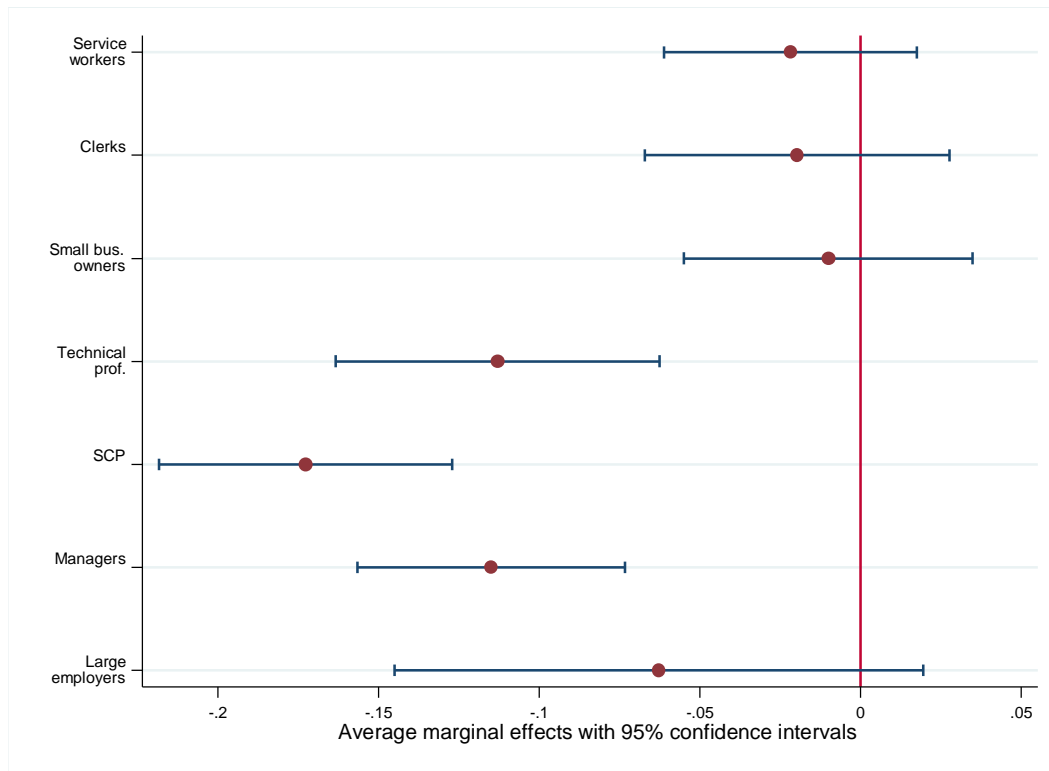
**Figure 4.4: Heterogeneity in the association between party choice and distance on the issue of immigration for all occupational classes vs. production workers**



and small business owners do display a stronger association between ideological distance and vote than production workers but to a smaller extent than professional classes, for the two the impact of ideology is about 0.075 points stronger than for production workers. As argued in the previous chapter, the reason why production and service workers appear to be less ideological than other occupational classes may be partly due to the fact that the culturally authoritarian and economically redistributive preferences that characterize them are not easily subsumed in the unidimensional left-right scale. In fact, the first analyses in this chapter have indicated that these workers are relatively more likely to support both radical right and left-wing parties. This result could also indicate that, overall, workers' electoral choices are driven to a lesser extent by general ideological closeness to parties, and that, instead, these workers place greater weight on parties' positions on specific issues that are directly relevant for them.

Figure 4.4 presents a similar plot for closeness to parties on the issue of immigration. In contrast to ideological placement, class differences with respect to production workers are generally smaller in size, except for socio-cultural professionals for whom divergence from workers is comparable (even slightly larger) to the one observed on

**Figure 4.5: Heterogeneity in the association between party choice and distance on the issue of tolerance towards homosexuality for all occupational classes vs. production workers**



ideology. Moreover, fewer classes are significantly different from workers (at the 0.05 level). As in the case of ideology, class differences appear to be articulated along vertical class divisions. In line with earlier claims that socio-cultural professionals place greater weight on cultural issues, distance on the issue of immigration is more strongly associated with party choice for this class. Relative to production workers, socio-cultural professionals are additionally 0.24 points less likely to support a party that is most distant on this issue, in comparison to one that occupies their same position. Technical professionals and managers also display statistically significant divergence from production workers, although of smaller size (about 0.11 points). The other four occupational classes do not display statistically significant deviations from production workers, for which distance on the issue of immigration is significantly and negatively associated with the likelihood of supporting a party (with a decrease of 0.157 points when distance changes from the minimum to the maximum).<sup>37</sup> This vertical division along the class structure could indicate, as we hypothesized above, that programmatic representation is weaker among the lower-grade classes in comparison to the higher-grade. It is, nevertheless, surprising to find that

<sup>37</sup> The average marginal effect of the constitutive term for distance on immigration is presented in Appendix 4.D

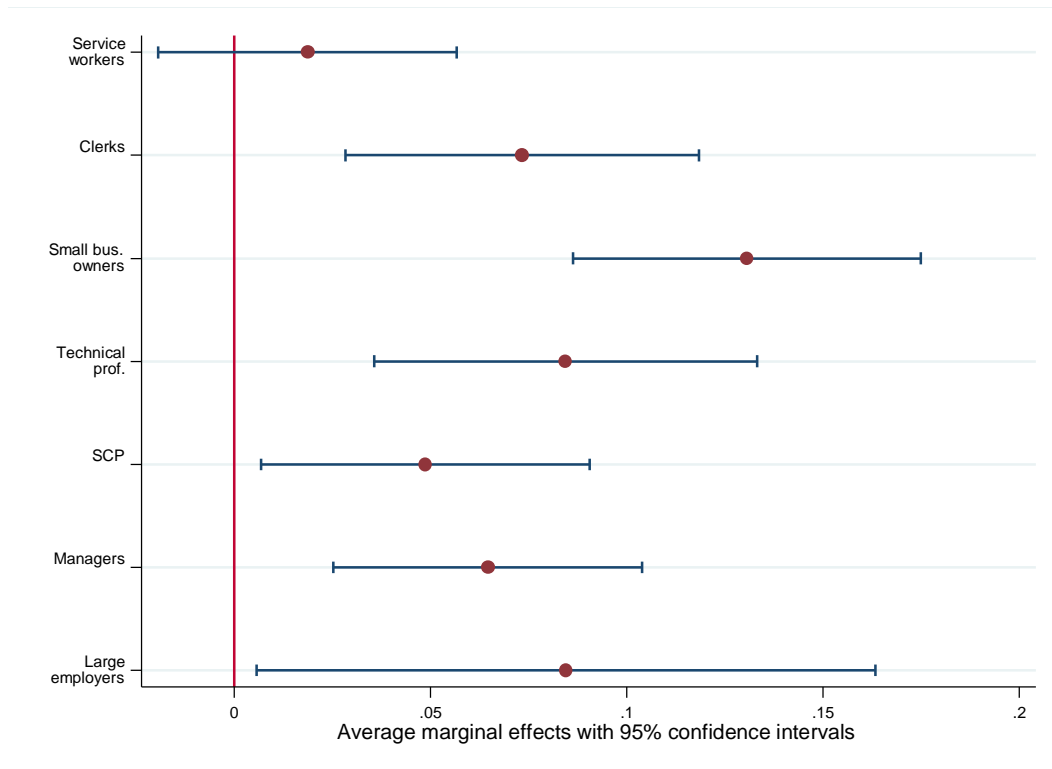


production workers are amongst the classes to place lower salience on the issue of immigration, when recent literature has indicated that their turn to the radical right could be explained by their culturally authoritarian preferences, and particularly to their opposition to immigration.

Figure 4.5 presents the results for the other item in the analyses that taps the cultural dimension: tolerance towards homosexuality. On this item, the differentials to production workers are generally smaller than in the case of immigration or ideology. The results from this model mirror those found on immigration: the classes exhibiting a greater impact of this issue on their party choice are technical professionals, managers and, especially, socio-cultural professionals. While for the first two classes the relative difference to production workers is of about 0.11 points, for socio-cultural professionals it is 0.17 points. These results highlight again the similarity between production and service workers, which in this case is also extended to office clerks and small business owners. Observing that the greatest differences appear along vertical class divisions provides further evidence for the notion that programmatic linkages could be weaker among lower-grade classes. Moreover, the results from figures 4.4 and 4.5 indicate that socio-cultural professionals consistently place greater weight on distance to parties on cultural issues in explaining their party support, even more so than other professional classes.

Figure 4.6 presents the results for the last issue, and the only item capturing the economic dimension of conflict: the distance between parties and respondents on the issue of income redistribution by the government. This issue displays notable differences from the ones just considered. As for all other issues, distance on redistribution is negatively (and significantly) related to the likelihood of supporting a party for production workers. When distance to a party on the issue of redistribution changes from the minimum to its maximum, production workers are 0.304 points less likely of supporting that party (as indicated by the average marginal effect presented in Appendix 4.D). However, in contrast to the previous items, for other occupational classes distance on this issue has a lower impact on the probability of supporting a party than for production workers. In other words, production workers are the class for which the weight of the issue of redistribution is greatest in explaining their party choice. As in previous models, this also applies to service workers, which do not display statistically significant deviations from the reference category. The class-deviations from production workers are, in absolute terms, slightly smaller in size than in the issue of tolerance towards homosexuality (which were already smaller than on immigration and ideology). While production and service workers are the classes for which this issue is most salient in explaining vote, it is least salient for small-

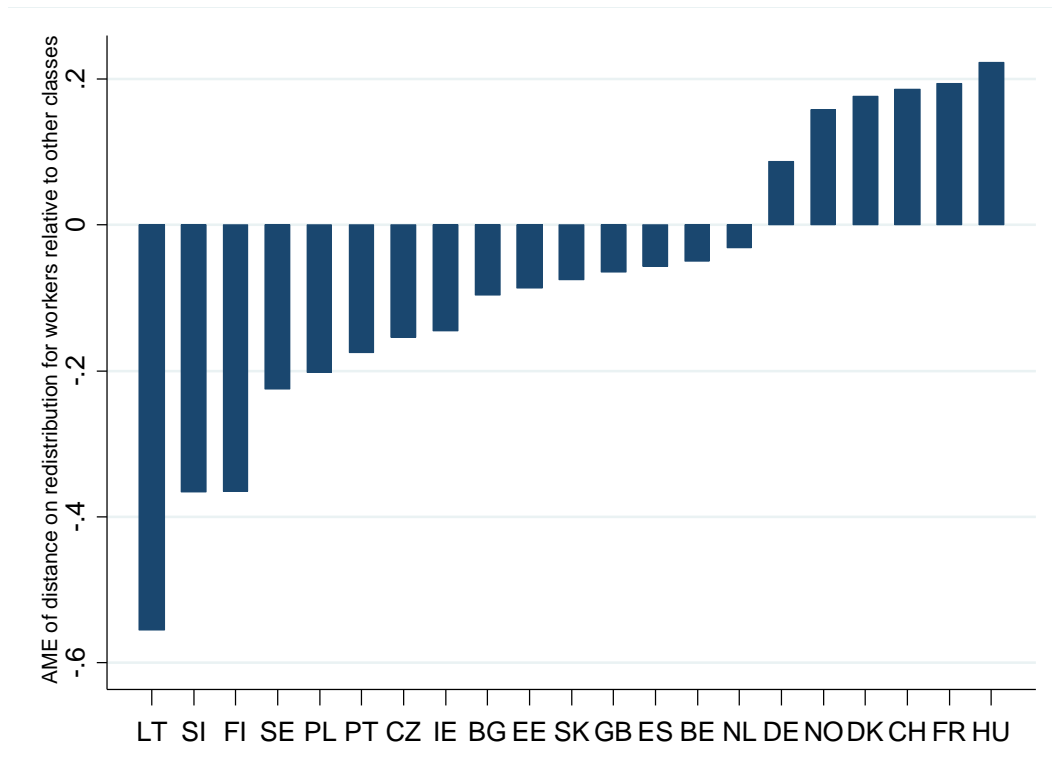
**Figure 4.6: Heterogeneity in the association between party choice and distance on the issue of redistribution for all occupational classes vs. production workers**



business owners (with a difference of about 0.13 points). After service workers, it is for socio-cultural professionals that the weight of redistribution distances is closer to that of production workers (the difference to production workers is of about 0.05 points). In sum, we find that for all classes increasing the distance between voters and parties on the issue of redistribution reduces the likelihood of supporting that party to a lower extent than it does for production workers (even if for service workers this difference is not statistically significant at the 0.05 level).

Finding that distance on the issue of redistribution is more salient for production and service workers' vote appears to contradict earlier research indicating that production workers were placing less weight on economic considerations. However, we must also take into account that the analyses at hand are based on the probability of voting for any party, not just radical right parties. Possibly, we would obtain different results if we focused on the impact of distance in the support for one specific party family. This is not possible with the current data because of the limited number of observations left to estimate the models if we separated the analysis by party family. To further explore this unexpected finding, following de Vries et al. (2011), I estimate the interactive effect between distance on the

**Figure 4.7: Heterogeneity in the association between party choice and distance on the issue of redistribution for production and service workers vs. all other classes by country**



*Note:* The coding in this model is different because all other classes are set as the reference category. Positive values indicate that distance matters less (is not as negatively related to vote) for production and service workers in determining their vote.

issue of redistribution and class location separately by country. To facilitate the interpretation of the results, and because these estimations are based on a substantially lower number of observations, class location is measured by separating production and service workers from all other classes. Through this strategy, we can observe whether there are any differences in the relative weight that workers place on distance in redistribution (in comparison to all other classes) across countries. Figure 4.7 displays average marginal effects of the interaction. Because the reference category in these models are respondents in all other classes, a positive interaction effect for workers indicates that distance on this issue matters less for them. This figure shows that there are six countries in which the economic issue of redistribution matters less for workers than for other classes (in descending order): Hungary, France, Switzerland, Denmark, Norway and Germany. In a majority of these countries we find populist right-wing parties contesting national elections. Moreover, the next two countries in terms of size of the interaction (for which the difference between workers and other classes is already negative) are the Netherlands and Belgium.

This could indicate that the extent to which workers place greater weight to economic distance varies by country. Where parties clearly contest workers' support on the cultural dimension, distance on the redistributive issue is more weakly associated with workers' vote. Because of the limited number of country-level observations (21 countries), I cannot extend the analyses to two-stage multi-level models (as implemented by de Vries et al., 2011). However, this exploratory analysis hints to a pattern that could be further studied in future research.

## **Discussion**

In contrast to the post-industrial dealignment thesis which contends that social classes have become increasingly indistinguishable in their political predispositions and that class plays a minor role in explaining preferences—especially over economic issues—the results from the two types of analyses implemented in this chapter indicate that this is not the case. We find evidence of persisting class differences in electoral behavior, and of this behavior being grounded on issue preferences. We do find, however, that the class-party association has become relatively complex in post-industrial societies because it is based on more than one dimension of political competition, and class alignments vary over these different dimensions.

Building on chapter 2, which addressed how classes differ in terms of their issue preferences, the analyses in this chapter have focused on electoral behavior. Here again, I focused on the comparison between workers and, coinciding with the analyses of preferences, found great similarities in the patterns of electoral behavior of production and service workers. Overall, these results indicate that we can conceive production and service workers as a relatively homogeneous working class. One of the distinctive traits of this working class is the greater likelihood of abstaining from voting in elections. It is precisely on electoral abstention that we find some of the greatest class differences. Lower-grade classes are less likely to have voted (also office clerks and small-business owners), and this is especially the case for production and service workers. Comparatively larger differences between service and production workers appear in the likelihood of voting for parties that have typically addressed cultural issues (radical right and green parties). This reflects the larger differences found between these two classes on cultural preferences. In the likelihood of supporting mainstream right or social-democratic parties these two classes are practically indistinguishable. The different analyses throughout this dissertation have repeatedly pointed to a relatively homogeneous working class, which displays both preferences and behavior that are different from other classes'. The fact that these classes show distinct preferences but are also particularly likely to abstain from electoral

participation indicates that their demands could be underrepresented. This can be problematic for the process of equality of representation, since none of the other classes (who are more likely to participate) display the combination of preferences held by workers. While some parties (especially the social democrats) may have attempted to cater to alternative constituencies because of the numerical decline of the production workers class, we see that service workers, a typically post-industrial class, holds similar preferences and could hence sustain a working class electoral niche.

The class profile of the constituencies of different party families displayed two alternative configurations of opposition, which paralleled the configuration found on preference dimensions. On the one hand, we found production workers and socio-cultural professionals occupying opposing ends on the likelihood of supporting green parties or the radical right. These results replicate findings from earlier research proposing a new cultural cleavage opposing production workers (as the most culturally authoritarian class) to socio-cultural professionals (as the most culturally libertarian). On the other hand, we also found production workers close to socio-cultural professionals but strongly opposed to self-employed professionals and large employers in the likelihood of supporting parties that are characterized by placing greater emphasis on economic issues, like the mainstream right or the radical left. Lastly, we found the support for social democratic parties to be relatively diluted in terms of class, only with self-employed professionals and large employers, and small business owners distanced from other classes and displaying a lower likelihood of supporting this party family.

Considering the full choice-set available to voters (i.e. different party families and electoral abstention) increases the complexity of interpreting and summarizing the results. However, this also allowed us to capture two phenomena that we would have overlooked if we had focused on a single party family. First, including electoral abstention as an outcome category uncovered a clear pattern of class non-voting. Second, considering different party families showed that the class-distinctiveness of parties' constituencies changes substantially depending on the party family we focus on. This is, in fact, what the literature emphasizing the importance of the supply side has argued (Elff, 2007, 2009; G. Evans & De Graaf, 2013b). For instance, if we only considered social democrats, we would find a very diluted class profile in their support, and we would, therefore, erroneously conclude that there is no evidence of class voting. However, if we focused instead on the mainstream right or green parties, we would find clearer class profiles in their support and arrive to a different conclusion about class voting.

After having found that classes differ in their electoral behavior and building on the differences we found on preferences, the second part of the analyses assessed whether vote choice is grounded in issue preferences and can be considered of a programmatic kind. Studying the impact of distances on issues between voters and parties on the likelihood of voting for a party, these analyses indicated that being closer to a party on an issue increases the likelihood of voting for that party. Moreover, distances on some issues were more closely associated with vote choices than others. We found the strongest impact for ideological placement (which subsumes a wide range of different issues), followed by the issues of redistribution and immigration (for which the effects were of similar size), and the issue of tolerance towards homosexuality, which shows a weaker association to vote choice. Overall, these results provide evidence in favor of programmatic class voting, since we found classes to differ in preferences and behavior, and behavior to be guided by preferences. Moreover, a greater distance in any of these issues significantly decreased the likelihood of supporting a party among all classes. There is, however, one caveat in these analyses, namely, that they cannot consider electoral abstention. This means that we could be overestimating the total amount of programmatic voting in the electorate, because we are failing to account for the fact that some individuals do not vote. If we contextualize it with the class differentials found for electoral abstention we may come to the conclusion that there are programmatic party-voter linkages for those who vote, but that there is also a large proportion of individuals, especially working class, that do not vote and would, hence, be less likely to see their preferences represented.

Lastly, I also allowed the impact on voting of distances on the different issues to vary by social class. These analyses indicate that there is indeed class heterogeneity in the salience attributed to distances to parties on different dimensions. Furthermore, these class differences occur mostly along the vertical class dimension. Throughout this dissertation, we consistently find that service workers differ little from production workers, but in this case the similarity was frequently extended to other lower-grade classes (like office clerks or even small-business owners). Also among the professional classes horizontal differences were rather slim. In three out of the four different items, distance to parties has a weaker impact on workers' vote than in other classes'. This could indicate that the extent to which workers vote programmatically is lower. Together with the differential levels of abstention, this could indicate that workers' preferences are less likely to be represented by parties.

In contrast to what we may have expected given the literature on the right-wing turn of the working class, there is no evidence that these workers' (nor service workers') vote is more strongly associated with closeness to parties on cultural issues. On the contrary,

distances on immigration, on tolerance towards homosexuality and on ideological placement are less salient in explaining production and service workers' vote than in explaining the party choice of other classes. Only on the issue of redistribution was distance to parties more closely associated to workers' vote. As I argued above, this 'unexpected' finding may be grounded in the fact that these analyses did not study the vote for a particular party family. These analyses on the impact of issue distances modeled the likelihood of supporting any party, most of which are mainstream parties or other parties that do not necessarily mobilize workers on cultural issues. A preliminary exploratory analysis of variation between countries suggested that the heterogeneity in the weight classes place on different issues could be related to the configuration of the partisan supply in the country. This, however, is a matter for future research since the reduced number of country-level observations does not allow for the implementation of a multilevel model. Moreover, if more observations per party family are available, the analyses can be expanded by estimating separate models by party family, which could contribute to our understanding of how different parties mobilize their constituencies on different issues.

Starting from the scholarly debate about the prevalence of class voting in post-industrial societies, this and earlier chapters in this dissertation have assessed to what extent classes differ in their specific issue preferences and in their electoral behavior. After having studied these different individual-level relationships based on cross-sectional data from different countries, the next two chapters in the dissertation take a different approach by relying on longitudinal data. These chapters maintain the focus on the individual-level impact of social class, and delve into the topic of how changes in class location throughout individuals' employment careers, and tenure within a specific social class are related to political preferences. Because cross-national panel data is not available, the analyses must necessarily focus on a single country.





## **Chapter 5**

### **Permanence matters. The moderating role of class tenure in the relationship between social class and political preferences**

#### **Introduction**

The findings of earlier chapters indicate that class divisions are still relevant determinants of political preferences and behavior but that, at the same time, the configuration of class-party linkages has changed and become more complex, as indicated by recent research (Beramendi, Häusermann, Kitschelt, & Kriesi, 2015; Kitschelt, 2004; Rydgren, 2013). These new approaches to studying class politics have emphasized that arguments about the political impact of social class should be adapted to the context of advanced economies by considering the increasing diversification of the occupational structure, the changes to the supply side of electoral politics, as well as the new issues and dimensions of political conflict. Yet, surprisingly little attention has been devoted to another factor that may affect the relationship between class and preferences in post-industrial societies: the (in)stability of class location throughout a person's life.

Taking into consideration that class location is not necessarily a stable trait in an individual's employment career is particularly important in the context of post-industrial societies. As the dualization and atypical employment literature has indicated, the stable employment biography of the industrial era has become increasingly infrequent, while weaker attachment to the labor market and interrupted employment careers have become more common (Davidsson & Naczyk, 2009; Emmenegger et al., 2012b). Hence, the assumption that class tenure (i.e. the time an individual has spent in a specific social class) is homogeneously distributed across the labor force is especially problematic in this particular context, where individuals are likely to experience interrupted employment careers and frequent changes in their class location.

In contrast to previous chapters of this dissertation and to most analyses of class-voting, which are predominantly based on cross-sectional data and assume that the stability of class location is homogeneous across respondents, in this chapter I rely on panel data to analyze how the time an individual has spent in a specific class moderates the relationship between social class and political preferences. As the literature on class formation suggests, it is more likely that class location will affect political attitudes and behavior when individuals see their personal situation and future prospects tied to those of their class and other individuals in it (Weber in Gerth & Mills, 2014; Wright, 1997, 2005). If we expect class location to affect interests and preferences this should be especially so for those individuals

who have been stable incumbents in a class. These people have been continuously exposed to the work experiences, tasks and interactions that characterize their class location, and they should also be more likely to have identified the impact of class location on their life chances (Weber in Gerth & Mills, 2014). Moreover, having been stable occupants of a class implies that they will have experienced a longer period of occupational socialization (Ashford & Nurmohamed, 2012; Mortimer & Simmons, 1978). On the contrary, for individuals who are only temporarily or have recently entered a certain class, their class location should not have crystallized into distinct class-associated interests and political preferences.

To assess the moderating role of tenure on the association between class and political preferences I rely on data from the British Household Panel Survey (BHPS). Using information from the annual waves of the panel and the additional retrospective questionnaire on employment spells I compute a measure of class tenure, which I operationalize as the amount of time that a respondent has uninterruptedly been in a specific class. Through this measure I analyze how tenure moderates the association between class location and preferences on economic and cultural issues, as well as on party preferences. The results of these analyses indicate that there is a moderating impact of tenure, and that class differences in political preferences are greater among respondents who have been incumbents of an occupational class over a longer period. Moreover, there are differences in the relevance of tenure for the different outcome variables under consideration. While tenure plays a moderating role in the association between class and economic preferences, this is not the case for cultural preferences. Furthermore, class tenure also moderates the association between class and partisanship. This impact of tenure suggests a process of class socialization or, at least, of reinforcement of class preferences.

This chapter is structured as follows. The next section presents the rationale for accounting for tenure when studying the relationship between class and political preferences and behavior. I then present the data under consideration, the decisions pertaining to the operationalization of class tenure, the limitations of working with a single case and the modelling strategy. The subsequent section presents and discusses the results. The last section concludes and reflects on the limitations and possible extensions of these analyses.

### **Theoretical background**

Due to the stability of employment careers in industrial economies, and considering that class was traditionally conceived as an anchor of political behavior (e.g. Lazarsfeld et al., 1968), most research studying the relationship between class and political preferences

has assumed homogeneous effects of class, irrespective of whether individuals are new entrants or life-time incumbents of a given class. Yet class tenure, which I define as the time a given individual has been in a specific class location, is not a trivial aspect for the formation of class-distinct preferences and behavior. In fact, any discussion about the political effects of class implies a process by which economic class comes to have an impact beyond the market situation of the individual (i.e. her economic prospects and risks) and affects interests and behavior beyond the economic sphere. The time an individual has spent in a class is likely to play a crucial role in this process. Although class tenure has not been explicitly studied as a moderator in the relationship between class location and political preferences, there are different strands of research in sociology and political science that suggest that stability in a class location can affect the strength of class effects in different realms. Therefore, besides the classical political science literature that conceived class as an anchor of political behavior, I draw on theories of class formation and of occupational and professional socialization in order to theorize about the relevance of class tenure.

Individuals sharing a class location face common life chances as well as similar experiences in their daily work. As discussed in chapters 1 and 2, these life opportunities and the experiences arising from job activities should, in turn, shape political preferences. Nevertheless, the influence of class location and daily work experience on interests and preferences may not be automatic, and the time an individual has spent in an occupational class can be considered as one of the elements contributing to the formation of class-based attitudes and behavior. One way through which class can affect interests and political preferences is if individuals see their future and their life opportunities tied to those of a larger group, to those of the class they are located in. In this sense, we can think of stability in class location as a condition for class incumbents to become aware of the connection between the causes and consequences of their class location, and how this is shared with other fellow class members. Establishing this connection facilitates the formation of class consciousness (Breen, 2005). Perceiving one's future prospects and life opportunities as bounded to those of a larger group is crucial for the development of class action, and for class location to have implications beyond the economic prospects of the individual (Wright, 2005). This is, presumably, more likely to happen when individuals have been long-term incumbents of a specific class and perceive themselves as stable members in it.

The shift from simply sharing a similar market position, with the implications this has for life chances, to developing class consciousness (or even class action) is more likely to occur when class membership is stable. This touches upon Schumpeter's metaphor of class resembling a hotel or an omnibus, *'always full, but always of different people'*

(Schumpeter in Reisman, 2004, p. 100). If class membership is short and unstable, with frequent mobility in and out of classes, it is less likely that a sense of belonging to a class will emerge. It is important to remark that the development of class consciousness is not necessary for a moderating effect of tenure and, by the same token, a moderating impact of tenure does not imply the existence of class consciousness. What the class consciousness argument points to is that there are certain conditions under which class location (defined exclusively as market position) will have an impact beyond economic prospects, and that these conditions may be facilitated by longer and stable class tenure. Incumbents in an economic class may hold common interests which are translated into similar political preferences and behavior even in the absence of class consciousness. However, even with this weaker form of class formation there is still a role for class tenure, since the process by which class location affects interests and experiences is not automatic, as it is made evident in the literature on occupational socialization.

Early works in sociology of the occupations and professions analyzed adult socialization in the workplace and how it shaped personality and behavior both within and beyond the work sphere (e.g. Kohn & Schooler, 1982; Mortimer & Lorence, 1979). These studies examined occupational socialization as a process by which, through work experience and formal instruction, individuals internalized behaviors and values pertaining to the occupation they were embedded in. Because the job and workplace play an important role in the life of an adult, and because most adults will engage in work for a large part of their lives, these studies expect occupation to have an influence on personality and other aspects that transcend the work sphere (Ashford & Nurmohamed, 2012; Frese, 1982; Mortimer & Simmons, 1978). Occupation and the job environment are also seen as crucial places for adult socialization in the literature on political participation and life-time socialization. For instance, Almond and Verba (1965) argue that adult experiences in the place of work can have a crucial impact on political attitudes. So does Pateman's (1970) work, which highlights the relevance of participation in the work sphere for attitudes about political participation. Pateman (1970) maintains that the workplace and its hierarchical relationships can be considered as one of the most 'political' arenas in which individuals interact in their daily lives.

According to this literature, work experiences are related to the adoption of values and behaviors through different mechanisms. These mechanisms and processes can be generally grouped in two main categories: one that refers to the interactions established in the workplace and another one related to the nature of the work carried out. As commented in chapter 2, these mechanisms closely parallel the defining elements of Oesch's work logic.

The social networks established at work and the interactions with coworkers, supervisors, mentors, or recipients of work (like clients, patients, or users) are seen as one of the forces of socialization at the workplace (Ashford & Nurmohamed, 2012; Mortimer & Simmons, 1978). Moreover, the characteristics of these interactions (e.g. whether they are mostly embedded in a strict hierarchy or entail negotiation processes among equals) are expected to exert a socializing influence. The actual nature of the work is also expected to mold values. A few examples of work characteristics that were related to values and attitudes are: whether tasks involve the use of highly specific skills, the degree of intellectuality of work tasks (doing complex work with data or people), the opportunities to exercise self-direction and use initiative and independent judgement at work, or the need to conform to externally imposed rules (Frese, 1982; Kohn & Schooler, 1982). The extent to which individuals are exposed to these processes and work characteristics was associated with attitudes such as autonomy values, tolerance towards non-conformity, authoritarian conservatism, trustfulness, orientation toward change, or civil libertarian attitudes (Kohn & Schooler, 1982; Korman, 1975; Mortimer & Simmons, 1978). In short, the occupational socialization literature provides different mechanisms through which class location can act as a continuous force shaping values and preferences. The continuous nature of these mechanisms suggests that class tenure should be important for the translation of class positions to political attitudes and behaviors.

Due to the stability of employment careers in industrial economies, classical works in political science assumed that individuals would maintain a life-long attachment to a class, not only as a place of work but also as a source of information, interactions and networks. This stability in class location implied that class acted as an anchor for political preferences and behavior. Hence, Lazarsfeld et al. (1968) and Lipset and Rokkan (1967) conceived stable socio-structural characteristics—social class among them—to be decisive determinants of political attitudes and behavior. In fact, in *The American Voter*, the economic structure and social divisions appear as distant determinants of the vote in the funnel of causality (Campbell, Converse, Miller, & Stokes, 1960). Against the short-term impact of issues, candidate evaluations or electoral campaigns, social class acted as an anchor of the vote since it was perceived as a stable trait over the life course.

In contrast to the industrial era, the higher prevalence of discontinuous employment trajectories and atypical employment in advanced economies could affect the extent to which class will act as an anchor of political preferences. We can expect class to provide such anchorage for those who hold consistent employment careers within the same class for a long time. Political divisions that mirror socio-structural divisions should be more

likely when these socio-structural divisions are solidly entrenched. For individuals with weaker and shorter attachment to a specific class (either because they transition between different classes or because they alternate periods of employment with spells of unemployment or intervals outside the labor force), class location should be less consequential for their political preferences. Changes in class location, in employment status or absences from the labor force imply an interruption in the process of adult socialization at the workplace—individuals cease to be exposed to the experiences from daily work, to the interaction with fellow workers, as well as to the economic conditions associated with class location. As a result, differences in preferences grounded in class should be greater among long-term class incumbents than among newly entrants.

As the literature reviewed suggests, class interests and class formation are not automatic consequences of class location, and tenure is likely to play a crucial role in the extent to which class will have implications beyond economic prospects. Moreover, the workplace is considered as one of the most relevant emplacements for adult socialization. Following the premises in this literature, I expect that class tenure will moderate the association between class location and political preferences, with this association being strongest among individuals with longer class tenure. In other words, the class differences in political preferences will be greater among workers with longer class tenure than among newly entrants into a class. Hence, I do not expect tenure to modify the direction of the association between class and preferences, but rather to reinforce this association as tenure increases.

When analyzing the potential moderating role of tenure, we need to consider that class is associated with preferences on both the economic and cultural dimensions of political conflict. On the economic dimension, we found conflict to be articulated by the opposition of workers against managers and self-employed professionals and large employers. On the cultural dimension, the main opposition was between socio-cultural professionals and production and service workers. In the previous chapter, we also found this class heterogeneity in preferences to be related to electoral behavior. Despite these overall differences found in a cross-section of European democracies, Evans and Tilley (2012a, 2012b, 2017) argue that, due to ideological convergence between parties, the link between class position and party preference has weakened in the British case. This might reduce the association between class location and preferred party in the specific case under study. While I expect longer class tenure to accentuate these class-based differences in political behavior and in issue preferences, the strength of this moderating effect could depend on the outcome variable under consideration.

The moderating role of tenure might be weaker for party choice than for economic and cultural policy preferences. Although not completely immune to changes and updating, partisanship should be relatively stable over time (Campbell et al., 1960; Fiorina, 1981). Moreover, partisanship is more indirectly related to class location than policy preferences, and it is also subject to other contingent factors such as party mobilization or the partisan supply. Following a two-stage understanding of class voting, social class should affect party preferences by means of altering economic and cultural preferences, which should, in turn, inform partisanship. Hence, since the relationship to class is more direct for policy preferences than for electoral behavior, the moderating role of tenure could be stronger for the former.

The analyses in this chapter about the importance of the time spent in a specific class location contribute to the ongoing debate about whether class effects operate mainly through socialization or selection into a class. This debate has appeared repeatedly in accounts of class voting, as well as in the occupational socialization literature. The hypothesis of a moderating impact of tenure builds upon the logic of a socialization effect. If class operated on preferences chiefly through selection, then differences between classes would be apparent immediately at the time of entrance in a class and tenure would play no moderating role. In practice, the occupational and professional socialization literature has suggested that both selection and socialization are at work. Longitudinal analyses evidenced that work experience exerted an influence on personality traits over time, but also that personality guided choice of occupation (Mortimer & Lorence, 1979; Mortimer & Simmons, 1978). It seems reasonable, hence, to assume a process of accentuation or reinforcement in which there is a reciprocal interaction between peoples' traits and attitudes, and the work situation (Frese, 1982). We can expect that, to some extent, individuals will select themselves into occupations on the basis of preexisting characteristics, and that these initial differences will sharpen over time with occupational socialization (Mortimer & Simmons, 1978). By studying the moderating impact of class tenure we cannot assess the extent to which selection effects operate since the analyses are restricted to the time after selection has occurred. Nonetheless, finding a moderating impact of tenure would provide evidence of, at least, a reinforcement effect.

### **Data and methods**

To assess the moderating role of tenure in the association between occupational class and political preferences I rely on data from the BHPS. This survey includes longitudinal information on respondents' employment status and occupation, on party preferences, as well as on economic and cultural preferences. Moreover, this panel also

includes information on individuals' work trajectories during the period between interviews, which is necessary to compute tenure accurately. Moreover, since the BHPS is a long panel (18 waves) this increases the likelihood of observing a wider range in the variable class tenure. Wave 1 of the panel started in 1991 with approximately 10,000 respondents from about 5,500 households. Additional samples were added in 1999 and in 2001. The samples under study in each of the following models vary by outcome variable, since the items used to operationalize the dependent variables are not always included in the same waves of the panel. I incorporate some restrictions to the samples under study. I include in them only men and women of working age (16 to 64) who are British nationals and are employed at the time of the survey. Because of differences in how survey items related to employment and occupation are asked to full-time students in employment, this group is also excluded from all analyses.

The United Kingdom appears as a suitable case for studying changes in class voting in advanced industrial economies and, particularly, for studying the impact of changes in employment trajectories for several reasons. First, in terms of patterns of occupational change and employment growth, the British is an interesting case because its productive structure underwent a process of occupational polarization, with considerable growth among both professional and low-skilled service occupations (Oesch, 2013a; Oesch & Rodríguez Menés, 2010). This should provide a larger number of observations in typically post-industrial occupations, and hence greater variation in terms of one of the key independent variables of interest: occupational class. Moreover, in the UK the occupational turnover is relatively higher than in other European economies. Longhi and Brynin (2010) found that over 10 percent of people change their occupation in Britain year on year (while, for example, in Germany the rate is 5 percent). Higher occupational turnover should increase the likelihood of observing a wider range of tenure in the sample under consideration. Evidently, the characteristics that make the UK a particularly suitable case for analyzing the impact of class tenure also constitute a limitation for the generalizability of the results to other contexts. This generalizability is also bounded by the singularities of the British party system, where the majoritarian electoral system limits the scope of multipartism. Although this trend seemed to be under change with the recent growth in support for smaller non-mainstream parties, the last general election of 2017 saw the return of a party system dominated by two parties. In short, some of the findings based on this specific country may not be generalizable to other countries where the tertiary sector has a lower weight in the economy (especially the low-skilled service sector), where occupational turnover is lower, or to countries with a multi-party system. Nonetheless, since the focus of the analyses is on how tenure moderates an individual-level relationship



between class and preferences, the mechanisms at play here should be generalizable to other contexts.

Another reason for working with BHPS data is that it contains different survey items that allow for the operationalization of the main dependent variables of interest in this dissertation. The BHPS includes several political attitudinal variables that are included on a rotating basis in certain waves of the panel. There are six items that tap into attitudes and perceptions regarding economic and social policy preferences that were included in waves 1, 3, 5, 7, 10, 14 and 17 of the panel. While two of these items measure perceptions of economic and social fairness in the country, the other four relate more directly to attitudes on economic and social policy. A factor analysis of these six different items (in the pooled dataset and separately by wave) reveals that the items related to perceptions of economic and social fairness and those related to economic and social policy preferences load on two different factors. Therefore, the operationalization of economic preferences is based only on the four items that refer more directly to policy preferences (which all load into the same factor) and excludes those items related to perceptions of social fairness.<sup>38</sup> The four social and economic policy preference items inquired respondents whether they agreed or disagreed with a set of four statements: (i) *'Private enterprise is the best way to solve Britain's economic problems'*, (ii) *'Major public services and industries ought to be in state ownership'*, (iii) *'It is the government's responsibility to provide a job for everyone who wants one'*, and (iv) *'Strong trade unions are needed to protect the working conditions and wages of employees'*. The outcome variable on economic preferences takes the average value of the responses to these items, based on the information available for each respondent. This approach maximizes the number of observations of this outcome variable. It maintains the range of the original response scale (from 1 to 5) where higher values indicate opposition to state interventions and redistributive mechanisms.<sup>39</sup> The items available to capture preferences on the cultural dimension are limited. Unfortunately, no item capturing attitudes towards immigration was included in the BHPS. In the analyses, I rely on a survey item asking respondents to what extent they agree with the statement that *'Homosexual relationships are wrong'*. This item was included in waves 8, 10, 12, 14, 16 and 18 of the panel. The five-point response scale is reversed, so that lower values in the scale indicate opposition to homosexual relationships.

The last part of the analyses considers the moderating influence of tenure on the association between class and party preferences. The BHPS offers different options for

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<sup>38</sup> The results of the factor analysis can be found in Appendix 5.B.

<sup>39</sup> Details on the operationalization of all variables can be found in Appendix 5.A.

measuring respondents' partisanship. One possibility would be to use information on the party for which the respondent voted in the last general election. The problem with this item, however, is that it is a constant over the rounds fielded in the period between elections. Using this survey item would imply that we can only rely on information on the waves immediately following an election (otherwise tenure would be measured after the outcome variable, party choice). The survey also allows to measure partisanship based on three items capturing the party for which the respondent shows greatest preference.<sup>40</sup> As with electoral behavior and abstention, this outcome variable includes a category for respondents who do not express a party preference.

The association between class location, tenure, and issue and party preferences is estimated based on random-effects regression models because one of the variables in the interaction (class location) is constant for individuals over time (during the period that tenure in that class increases). For this reason, fixed-effects models cannot estimate the constitutive term for class (since there is no within-individual variation in class location as tenure changes). An alternative would be to estimate fixed-effects models of tenure, after having split the sample according to class (i.e. one fixed-effects model for each of the eight classes). The problem with splitting the sample is that, for some classes, the models are estimated on substantially fewer observations, especially after taking into account that only individuals who have been surveyed at least twice contribute to the estimation of fixed-effects models. Moreover, after splitting the sample, individuals who change class location throughout the survey will contribute to different models (those of the classes they have been in), while those who only hold one class location will contribute to only one of the models. Since this cannot be accounted for in the estimation I chose to limit the analyses to the random-effects estimations.

### ***Measuring class tenure***

Because of its complexity, the operationalization of class tenure deserves detailed attention. The first step to compute how long respondents have been in a specific class is to code individuals in employment into Oesch's class scheme. This class assignment is carried out for all the different jobs that respondents have held along the panel, with this information being registered in two different BHPS data records: *indresp* which contains information on respondents at the time they were interviewed for each wave of the panel, and *jobhist* which contains retrospective information from the employment history of respondents (information that refers to the period between waves). The information on

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<sup>40</sup> Details on how this variable was coded are also included in Appendix 5.A.

respondents' employment spells between waves allows us to track any potential interruptions in class tenure between waves, and to retrospectively compute class tenure up to a time point between waves, when necessary.

Class tenure is defined as the amount of time (in years) that a person has been part of a class without interruptions.<sup>41</sup> Hence, to compute tenure it is necessary to have information on any interruptions or changes in employment careers (due to changes in labor market status or in jobs), and on the date at which each specific job (or employment spell) began. The crucial time point to be identified is the date at which a respondent entered a specific class location. Identifying entrance into a class requires defining which spells are considered as interruptions in tenure. In these analyses, I consider as interruptions in class location: being out of employment (because of being unemployed, in education or training, sick or disabled, or in family care) and changing between occupations that belong to different classes across consecutive job spells (i.e. without a break in employment between them). These interruptions and class changes set the tenure indicator to zero no matter how short the period out of employment is. This constitutes a rather conservative measure of permanence in a class because only truly continuous class membership contributes to measured tenure. Any changes in jobs within the same occupation, or any changes in occupation within the same class do not interrupt the measure of permanence in a class.

This approach differs from earlier chapters and from other studies on class politics which consider unemployed or retired respondents as class incumbents based on the last job that they held. In the analyses below, I consider that being unemployed or out of the labor force constitutes a break in tenure, even if the respondent re-enters the same class after this period. I opt for this approach because changes in people's labor market situation (like becoming unemployed) have been related to changes in political preferences (Margalit, 2013). In most cross-sectional analyses, and in previous chapters, this is dealt with by including a control for employment status at the time of being interviewed. In the analyses at hand, however, this becomes more complex because tenure is calculated retrospectively. Hence, it would be necessary to control not only for employment status at the time of the survey but also to include an account of whether there were any changes in employment status for the retrospective period to which tenure refers. For example, it would be necessary to include a control for whether there were any 'interruptions' that did not affect tenure, for what kind of interruptions this were, and how long before the time of the survey

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<sup>41</sup> Tenure was initially computed in days but rescaled to years to facilitate the interpretation of the regression coefficients. More details about the coding are made available in Appendix 5.C.

they took place. The way tenure is coded in the following analyses, although it might be conservative, establishes a clear and clean comparison between individuals in employment (in different classes) displaying different lengths of tenure.

Tenure is finally computed by subtracting from the date of the interview (the time at which the attitudes and preference variables are measured) the date when the first job within the class location held at the time of the survey began. Because this operationalization entails more complications than those discussed so far (especially due to the complexity of merging wave data with job spells data and retrospectively identifying class entrance) Appendix 5.C discusses in detail other issues of the coding procedure.

**Table 5.1: Descriptive statistics of years of tenure by occupational class**

	Mean	Std. Dev	1 <sup>st</sup> Quartile	Median	3 <sup>rd</sup> Quartile
Large employers	2.955	3.855	0.118	1.900	3.805
Small business owners	3.278	4.069	0.427	1.948	4.362
Technical professionals	3.694	4.276	1.000	2.641	4.416
Production workers	5.152	6.294	1.058	2.964	6.597
Managers	3.788	4.254	1.016	2.841	4.570
Clerks	3.505	4.183	0.962	2.392	4.030
Socio-cultural professionals	4.191	4.793	1.066	2.956	5.074
Service workers	3.609	4.569	0.882	2.307	4.132
Total	3.920	4.800	0.959	2.597	4.800

Table 5.1 presents descriptive statistics about the distribution of tenure by occupational class. These statistics are based on the sample of working age British nationals taking only one observation (one person-wave unit) per panel participant.<sup>42</sup> The distribution of years of tenure varies by occupational class. Production workers appear as the class with the highest mean tenure (slightly above five years), while at the other extreme we find self-employed professionals and large employers with the shortest mean tenure (close to three years). After production workers, socio-cultural professionals display the second highest average tenure which is almost one year shorter than that of production workers. This is a substantial amount if we consider that the difference between the two extreme classes is of about two years. Overall, self-employed workers show shorter length of tenure than employees. Although higher occupational mobility has been related to higher grade occupations (Longhi & Brynin, 2010), in this case shorter tenure does not seem to be related to either working- or middle-class occupations.

<sup>42</sup> For each individual that was interviewed at least in one of the waves of the panel I select the last observation (the last wave in which he/she was interviewed).

## Results

The analyses on the moderating role of class tenure are divided into three sections according to the dependent variable under consideration in each of them. First I analyze economic, then cultural and, lastly, party preferences. The coefficients of the different models are not directly comparable because they are based on different samples since these variables are asked at different waves of the panel.

### *Economic preferences*

The first part of the analyses focuses on the association between occupational class and preferences on economic issues. The first column in table 5.2 presents an additive random-effects regression model of economic preferences on occupational class, which includes as additional controls age, gender, and wave and region fixed-effects.<sup>43</sup> This first model summarizes the association between class and economic preferences without taking into account class tenure, hence resembling most cross-sectional analyses conducted in previous studies. Production workers are set as the reference category, thus all class coefficients indicate how each class differs from them. As documented in earlier chapters, class preferences on the economic dimension are mainly structured along the opposition between production and service workers on one pole, who favor state intervention and redistribution, and managers and self-employed professionals and large employers, who occupy the opposite pole on the economic dimension. These classes differ over economic issues by slightly over 0.2 points on the 1 to 5 response scale. In line with the results from chapter 2, socio-cultural professionals lean towards the redistributive pole on economic issues, placed closer to production and service workers than to other middle-class occupations.

Model 2 in table 5.2 summarizes the interactive model between class and tenure. Because production workers are set again as the reference category, the constitutive terms of the different classes represent the differences in economic preferences with respect to production workers when years of tenure is 0, while the constitutive term for tenure indicates the association between tenure and preferences among production workers. These results indicate that when tenure takes the value 0 (that is, at time of entrance into an occupational class) the average differences in economic preferences between classes are smaller than in the additive model. The coefficients are particularly reduced (relative to the

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<sup>43</sup> The region indicator identifies whether respondents were living in England, Wales, Scotland or Northern Ireland at the time they were surveyed.

additive model) for service workers and socio-cultural professionals for which they decrease by about 40 percent.

**Table 5.2: Additive and interactive models for the association between class and preferences on economic and cultural issues**

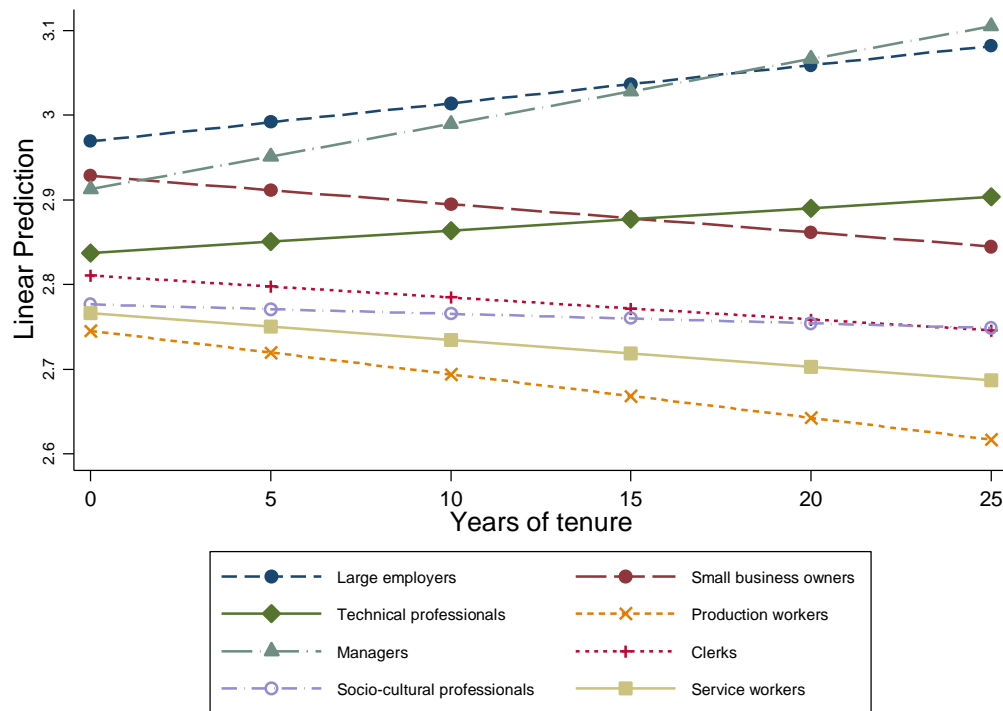
	(1) Economic preferences		(3) Cultural preferences	
	Additive model	Interactive model	Additive model	Interactive model
Class (Ref. Production workers)				
Large employers	0.252*** (0.022)	0.224*** (0.024)	0.246*** (0.037)	0.275*** (0.041)
Small business owners	0.199*** (0.013)	0.183*** (0.014)	0.080*** (0.022)	0.102*** (0.025)
Technical professionals	0.122*** (0.014)	0.092*** (0.016)	0.197*** (0.023)	0.210*** (0.026)
Managers	0.212*** (0.011)	0.167*** (0.012)	0.211*** (0.018)	0.220*** (0.020)
Clerks	0.079*** (0.011)	0.065*** (0.013)	0.148*** (0.018)	0.159*** (0.021)
Socio-cultural professionals	0.050*** (0.013)	0.031* (0.016)	0.316*** (0.022)	0.307*** (0.025)
Service workers	0.033** (0.011)	0.021+ (0.012)	0.087*** (0.018)	0.093*** (0.020)
Tenure (in years)		-0.005*** (0.001)		0.002 (0.002)
Interaction effects				
Large employers*Tenure		0.010+ (0.006)		-0.014 (0.010)
Small business owners*Tenure		0.002 (0.003)		-0.009+ (0.005)
Technical professionals*Tenure		0.008** (0.003)		-0.005 (0.005)
Managers*Tenure		0.013*** (0.002)		-0.002 (0.003)
Clerks*Tenure		0.003 (0.002)		-0.003 (0.003)
Socio-cultural professionals*Tenure		0.004* (0.002)		0.003 (0.004)
Service workers*Tenure		0.002 (0.002)		-0.002 (0.003)
Age	0.005*** (0.000)	0.005*** (0.000)	-0.017*** (0.001)	-0.017*** (0.001)
Male	0.118*** (0.010)	0.117*** (0.010)	-0.524*** (0.018)	-0.523*** (0.018)
Wave-FE	✓	✓	✓	✓
Region-FE	✓	✓	✓	✓
Constant	2.621*** (0.017)	2.635*** (0.017)	4.058*** (0.030)	4.051*** (0.031)
Observations	39,914	39,914	40,539	40,539
Number of individuals	13,724	13,724	13,483	13,483

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

Note: Economic and cultural preferences are measured on a 1-5 scale where higher values indicate opposition to intervention and more favorable attitudes towards homosexuality.

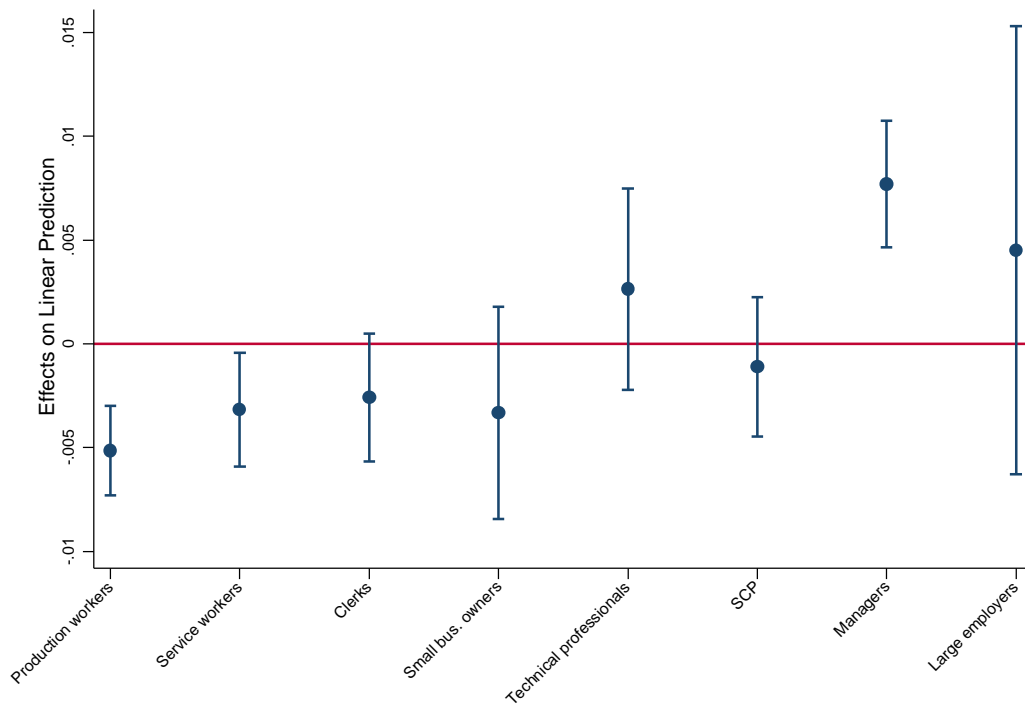
**Figure 5.1: Predictions of economic preferences by occupational class and years of tenure**



Regarding the constitutive term of tenure, we observe that with each additional year spent in the same class location, production workers are placed relatively more to the economic left by 0.005 points on the scale (this coefficient is statistically significant at the 0.001 level). This means that the difference in preferences between a newly entrant in the production worker class and one respondent with 10 years of tenure in this class is comparable to the overall average difference between production workers and socio-cultural professionals in the additive model, 0.05 points on the response scale.

To facilitate the interpretation of the interaction, Figures 5.1 and 5.2 present (respectively) predicted levels of preferences by class and tenure, and average marginal effects of tenure by occupational class. The distribution of years of tenure in the sample is positively skewed: the maximum tenure observed is of 49 years, but 99 percent of the distribution is under 25 years of tenure. For this reason, the class preferences are only predicted for values of tenure ranging from 0 to 25. As expected, figure 5.1 shows a fan-out effect of economic preferences along tenure, indicating that class differences in economic preferences are larger among long-time class incumbents. When tenure takes the value 0, the maximum difference between classes is between production workers and self-

**Figure 5.2: Average marginal effects of years of tenure on economic preferences by occupational class with 95 percent confidence intervals**



employed professionals and large employers and it amounts to 0.22 points on the 1 to 5 scale (or about a third of the standard deviation of the outcome variable). For 25 years of tenure, the maximum difference between classes amounts to 0.49 points, and it corresponds to the difference between managers and production workers. Although the difference more than doubles, this is only when comparing extreme values of tenure. When tenure is set at its mean for this sample (4.23 years) the largest difference is of 0.27 points between production workers and self-employed professionals and large employers, which implies a 22 percent increase in comparison to 0 years of tenure.

Figure 5.2 summarizes the average marginal effect of years of tenure by occupational class. Apart from the coefficient of tenure for production workers which I discussed above, years of tenure is significantly associated with economic preferences for service workers (with a coefficient of -0.003, marginally smaller than that of production workers) and for associate managers, which hold the largest positive coefficient (0.008). Although the coefficients are rightly signed for the other classes, with tenure reinforcing class differences, they do not reach conventional levels of statistical significance. It is interesting to find that the largest moderating role of tenure appears for the two typically



industrial classes: production workers and managers. This could indicate that there is a greater role for socialization in a class for these two groups. Moreover, these are the classes that are more clearly embedded in a command or authority structure, with managers located at the top of this structure and production workers at the bottom.

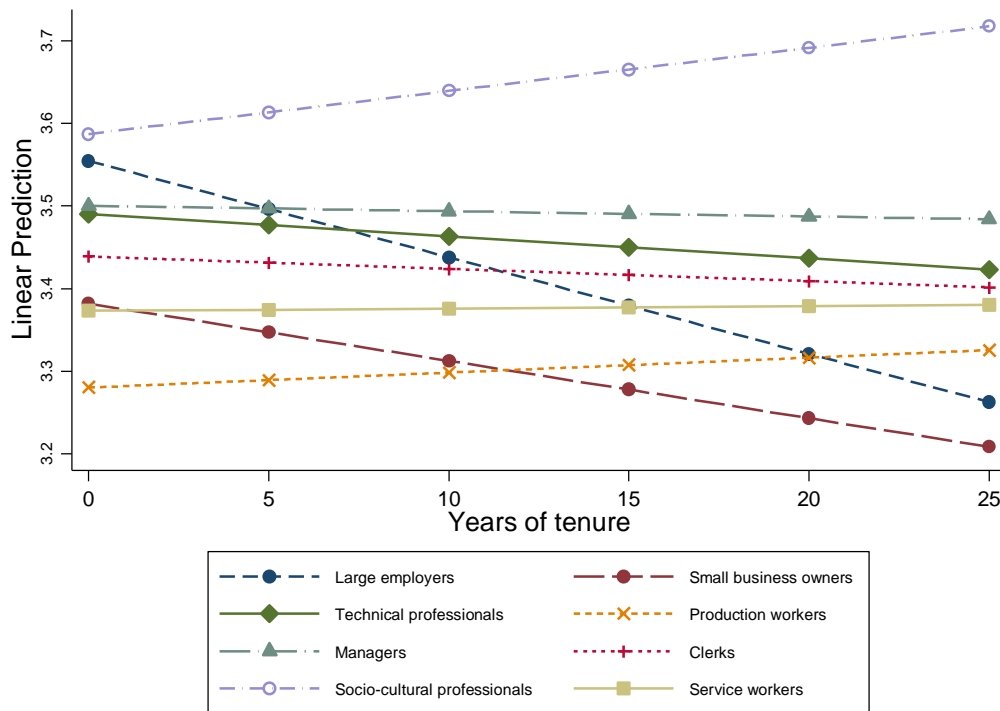
### ***Cultural preferences***

Models 3 and 4 in table 5.2 present the estimates of an additive and an interactive model on the association between class location and cultural preferences (in this case on the specific item of attitudes towards homosexuality). The results from the additive model resemble earlier findings. Low- and unskilled occupational classes appear as the most culturally conservative, with production workers showing the most extreme position of all classes. On the opposite pole, we find socio-cultural professionals holding the most libertarian cultural preferences. Other classes like technical professionals or managers hold relatively more middle positions.

These results are in line with earlier findings in the literature, but do these differences vary by length of class tenure? Model 4 incorporates the interactive term between the class indicators and tenure. As in the model for economic preferences, the constitutive terms for the different classes indicate the differences in cultural preferences between production workers and other classes when tenure takes the value of 0. In this case, however, instead of the differences between classes being marginally smaller under tenure 0 (in comparison to the average differences in model 3) they are slightly larger under this specification. Finding larger differences at tenure 0 than overall average differences between classes speaks against the hypothesis of a socialization effect of tenure in the case of cultural preferences. Moreover, the constitutive term for tenure is not significantly different from 0, indicating the absence of a statistically significant association between years of tenure and cultural preferences for production workers.

To facilitate the interpretation of the results, figures 5.3 and 5.4 present (respectively) predicted values of cultural preferences for the different classes along years of tenure, and average marginal effects of tenure for each of the occupational classes. In contrast to figure 5.1, figure 5.3 does not portray a fan-out effect. On the contrary, for most classes the association between class location and preferences varies little over tenure (managers, technical professionals, clerks, service workers, or production workers). Only socio-cultural professionals appear to experience as slight reinforcement of culturally liberal preferences along tenure, while for small business owners the reinforcement is towards the conservative pole. Self-employed professionals and large employers display a

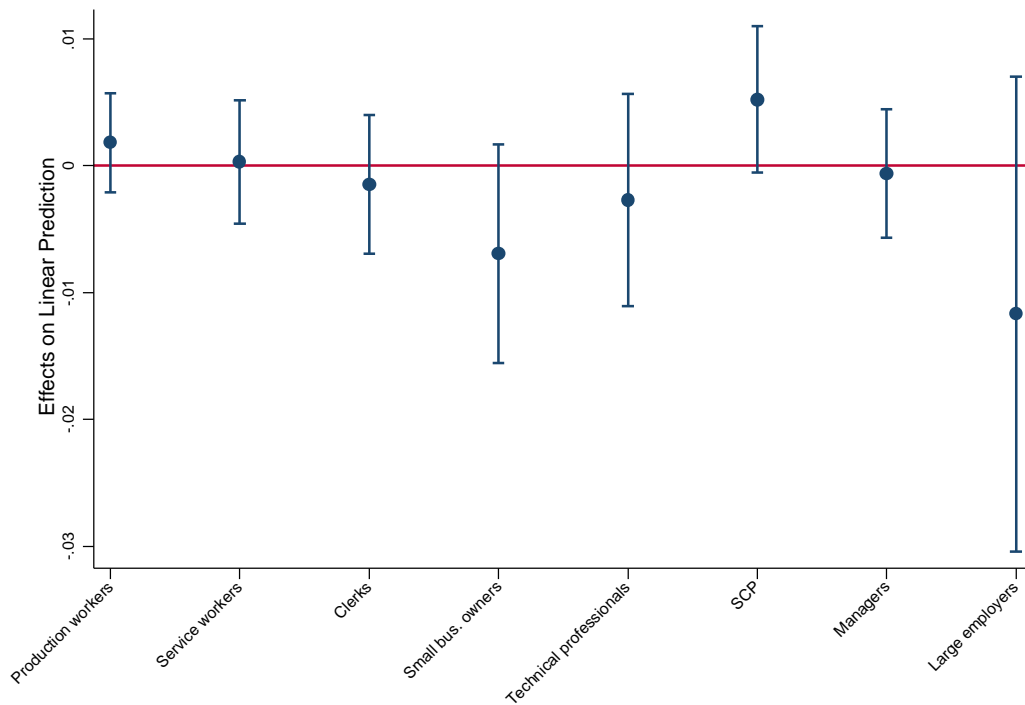
**Figure 5.3: Predictions of cultural preferences by occupational class and years of tenure**



steeply negative slope, but we must be cautious in interpreting the results for this class because it encompasses a relatively reduced number of observations (compared to other classes). This interpretation is confirmed in figure 5.4, which indicates that for none of the classes the association between cultural preferences and years of tenure reaches conventional levels of statistical significance. The lack of a moderating effect of tenure suggests the absence of socialization mechanisms in the development of cultural preferences in the context of the workplace. This could also indicate that there is greater selection into occupations when it comes to the values related to cultural preferences in contrast to economic preferences. I discuss further possible explanations for this finding in the conclusion.

The results discussed above for economic and cultural preferences are based on models that, other than region and wave fixed-effects, include demographic controls for age and gender. I have replicated these analyses including as additional controls: the level of education achieved by the respondent, whether the respondent's job is full- or part-time, and respondent's total income in the month prior to the interview. These factors have been related to political preferences, and could confound the association between class, tenure

**Figure 5.4: Average marginal effects of years of tenure on cultural preferences by occupational class with 95 percent confidence intervals**

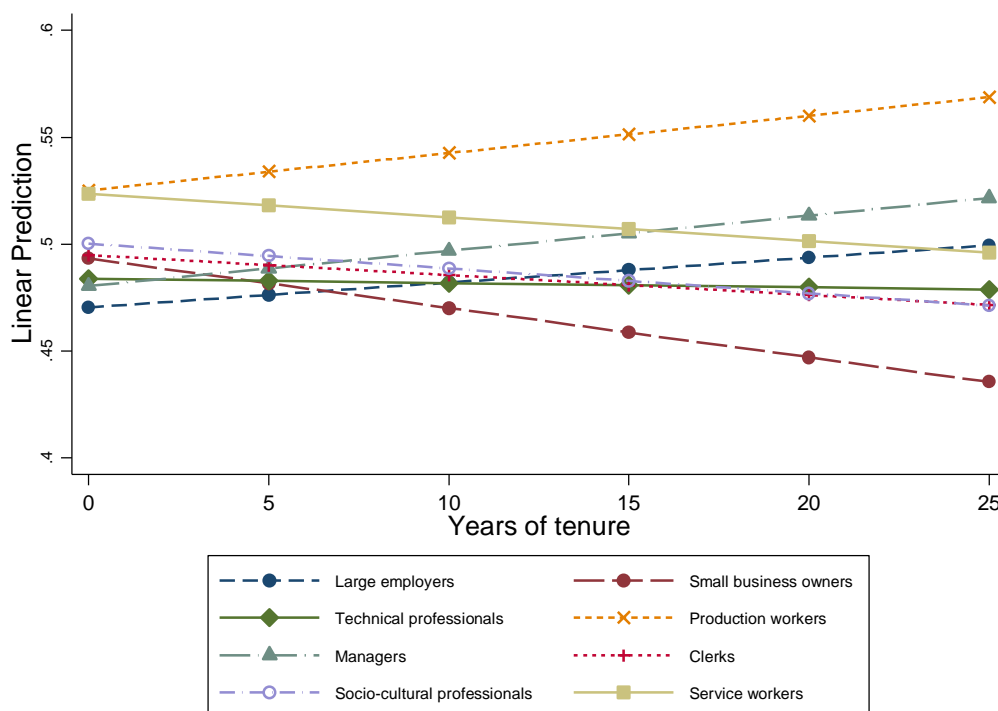


and preferences. These additional models report similar results (summarized in Appendix 5.E) in terms of the moderating role of tenure on the association between class and preferences.

### ***Party preferences***

Next I analyze how tenure moderates the relationship between class and party preferences. To capture the full choice set available to citizens in terms of party preference it is necessary to account for the fact that respondents may not report any specific party preference. Therefore, besides the major British parties, ‘no party preference’ is added as an additional category of this dependent variable. Because it is too computationally demanding to estimate a random-effects multinomial logistic regression model, the modelling strategy implemented establishes three sets of comparisons. As Alvarez and Nagler (1998) have indicated, as long as the sets of comparisons are rightly specified, a multinomial logit will be equivalent to successive applications of binomial logit, or in this case linear probability models, and the results will only differ in terms of the efficiency of the estimates (since the binomial logit or linear probability models are each estimated on a smaller sample). The outcome variable, party preference, has been coded into three distinct

**Figure 5.5: Predicted probability of preferring the Labour Party vs. preferring the Conservative Party or the Liberal Democrats by occupational class and years of tenure**



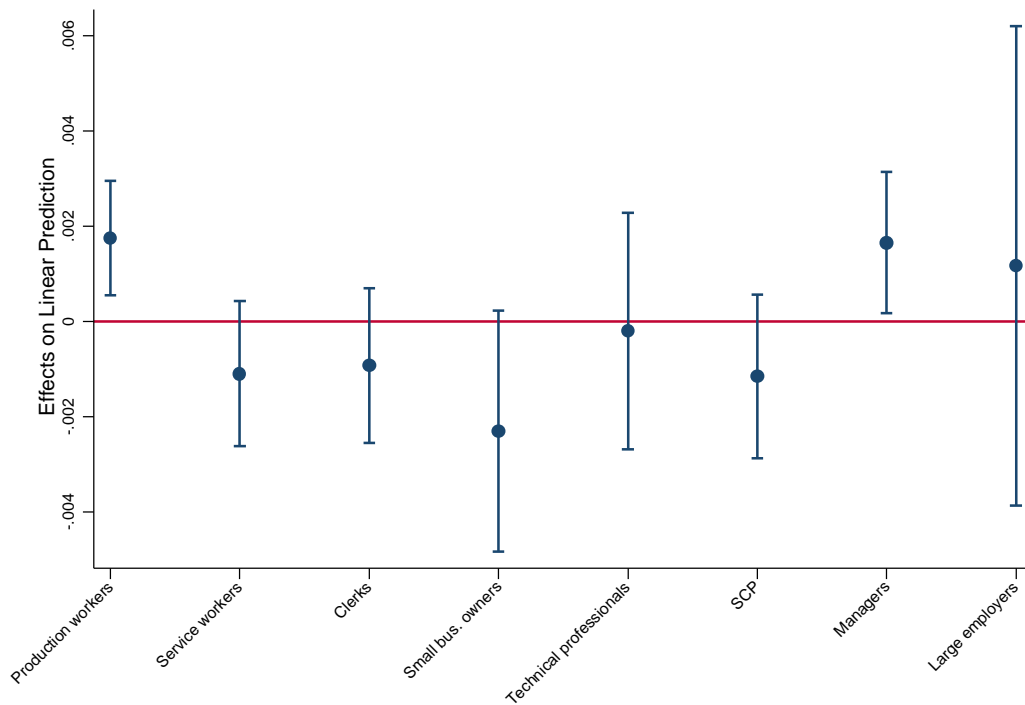
categories: (i) respondents who prefer the Labour party, (ii) respondents who prefer the Conservative Party or the Liberal Democrats, and (iii) respondents who do not report any party preference.<sup>44</sup> About 30 percent of respondents in the sample do not report a preferred party. Since party preference is coded into three different categories, three pairs of comparisons are possible. To facilitate the computation of marginal effects for the interactions, the models below have been estimated by means of linear probability models with random effects (see Ai & Norton, 2003).<sup>45</sup> The table in Appendix 5.D presents the results from the three linear probability models.

Figures 5.5 and 5.6 summarize the results of the model estimating the probability of preferring Labour (coded 1) vs. the Conservatives or Liberal Democrats (coded 0). The first figure summarizes predicted probabilities of support for each of the occupational classes at different levels of tenure (with tenure ranging from 0 to 25 years), while the second figure

<sup>44</sup> Preferences for other parties are set as missing values since there are too few observations to estimate preferences for these parties. An alternative specification that does not group supporters of the Conservative party with supporters of the Liberal Democrats (the latter are excluded from the models) generates equivalent results that do not alter the conclusions in this chapter.

<sup>45</sup> Logistic random-effects models portray equivalent results. Results from these models are made available in Appendix 5.E.

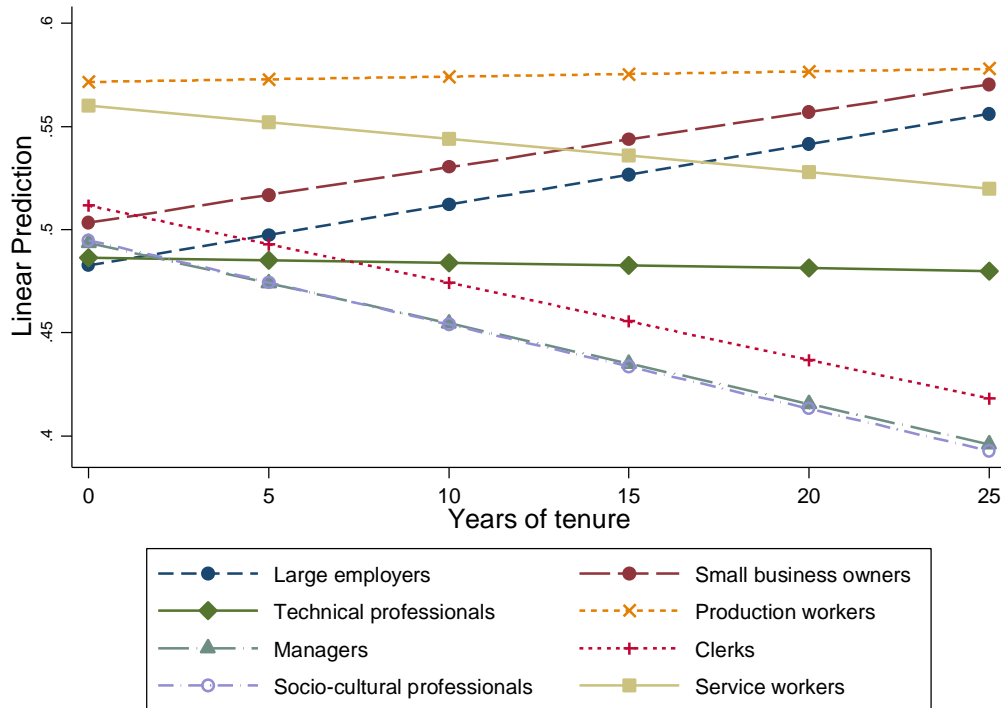
**Figure 5.6: Average marginal effects of tenure on the probability of preferring the Labour Party vs. the Conservative Party or the Liberal Democrats**



presents the average marginal effects of tenure for each of the occupational classes under consideration. Similar to the analyses of economic preferences, we can observe a slight fan-out effect in the distribution of class preferences along tenure. Classes are more similar in terms of party preferences for shorter than for longer tenure. As we would expect, production workers appear as the class with the highest likelihood of preferring the Labour party against the Conservatives or the Liberal Democrats along all levels of tenure, while self-employed professionals and large employers appear as the least likely to support Labour at lower levels of tenure, and at higher levels of tenure it is small business owners who are the least likely to support this party. The greatest class difference in the probability of supporting Labour instead of Conservatives or Liberal Democrats is of 6 percentage points when tenure takes the value of 0. This difference increases to 12 percentage points at 25 years of tenure. Although this is a large increase in class differences, this only occurs at the extremes. If we compare instead class differences at 0 years of tenure and at average levels of tenure (approximately 5 years) we see that they increase by a smaller amount.

Figure 5.6 indicates that, as it was observed for economic preferences, tenure is more strongly associated with party preferences for production workers, for which longer

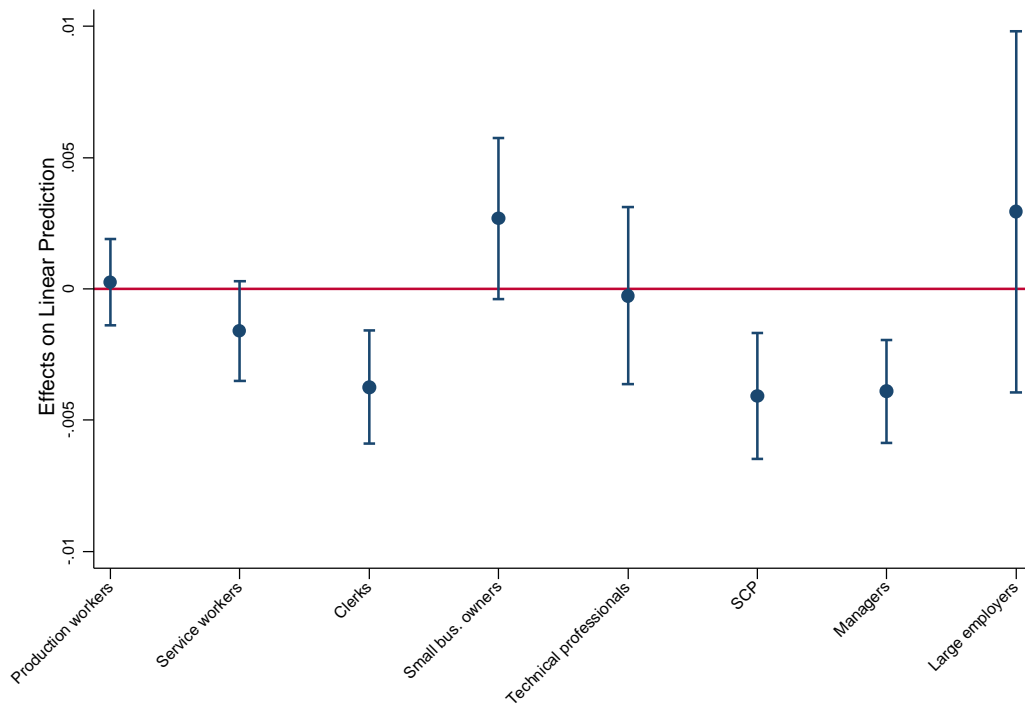
**Figure 5.7: Predicted probability of not preferring any party vs. preferring the Conservative Party or the Liberal Democrats by occupational class and years of tenure**



tenure increases the likelihood of supporting the Labour party. For managers we find that the average marginal effect of tenure is also statistically significant but it runs opposite to our expectations, since with each additional year of tenure managers become about 0.2 percent more likely to prefer the Labour versus the Conservative party or the Liberal Democrats. This result is difficult to explain, especially since we observed that for this class tenure was associated with lower support for left-wing economic policies. As I discuss in greater detail in the conclusion, this unexpected result could be partially explained by the configuration of the supply side in the UK.

Figures 5.7 and 5.8 present the same predicted probabilities and average marginal effects but now for the comparison of having no party preference (coded 1) vs. preferring the Conservative party or the Liberal Democrats (coded 0). In figure 5.7 we observe that, again, differences between classes are greater for respondents with longer class tenure. The largest difference in the predicted probability of not preferring any party instead of the Conservatives or Liberal Democrats is of 9 percentage points between production workers and self-employed professionals and large employers when tenure is 0, while it is of 19 percentage points between production workers and socio-cultural professionals at 25 years

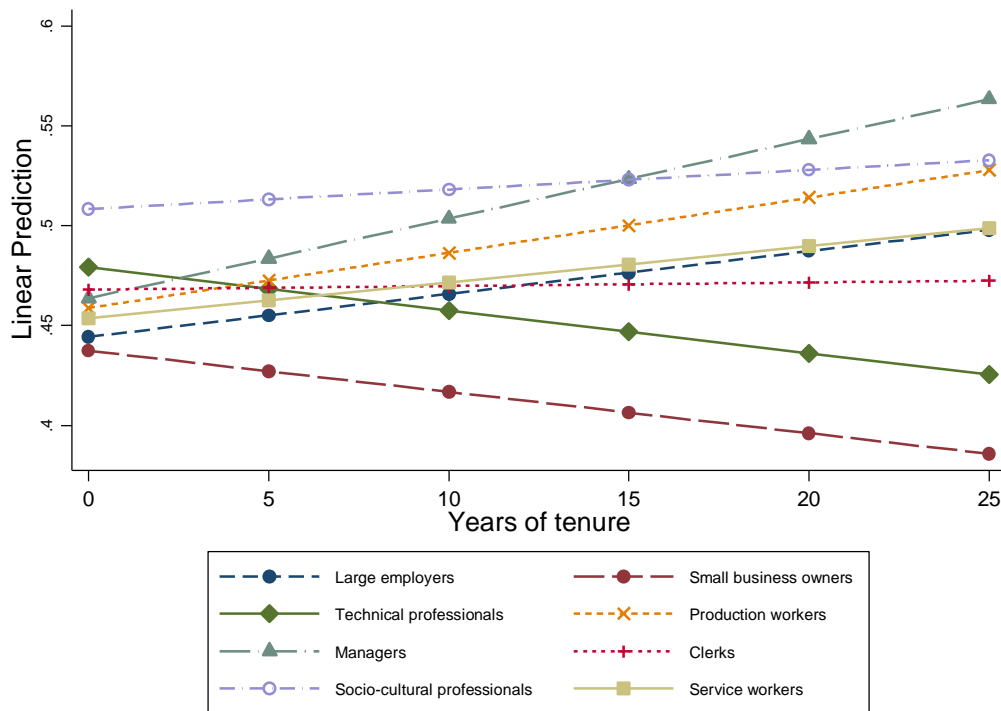
**Figure 5.8: Average marginal effects of tenure on the probability of not preferring any party vs. preferring the Conservative Party or the Liberal Democrats**



of tenure. Figure 5.8 shows that tenure is significantly and negatively associated with the probability of not having party preferences for three classes: office clerks, socio-cultural professionals and managers. For all three classes, longer tenure decreases the probability of not supporting any party and increases the probability of supporting the Conservatives or Liberal Democrats. This result is slightly unexpected for socio-cultural professionals, but the effect is mainly driven by the support for the Liberal Democrats (results not shown). An alternative specification comparing only the outcomes of no preferred party to support for the Conservatives alone returns no statistically significant association between class tenure and party preference for this class.

Lastly, figures 5.9 and 5.10 present the results for the comparison between preferring Labour (coded 1) against not having a party preference (coded 0). Again, we observe that class differences become larger at longer tenure. In this case, the maximum difference between classes increases from 6 percentage points for 0 years of tenure to 17 percentage points for 25 years. Figure 5.10 displays average marginal effects of tenure for the different occupational classes. For production and service workers, tenure is positively related to the likelihood of supporting Labour vs. not showing a party preference (although

**Figure 5.9: Predicted probability of preferring the Labour Party vs. not preferring any party by occupational class and years of tenure**

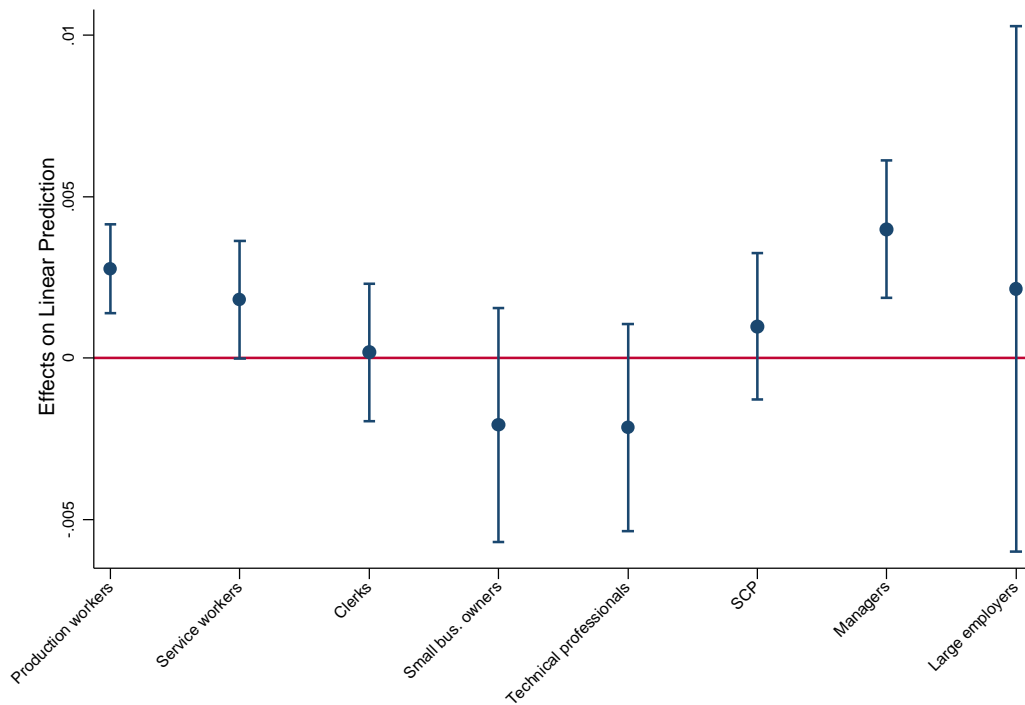


for service workers this is only statistically significant at the 10 percent level). This indicates that workers in longer tenure are more likely to be mobilized for left-wing parties than newly entrants into the occupational class. The association between tenure and support for the Labour party is also positive for managers, which again appears as an unexpected finding, although in this case it might be partially due to the fact that professional classes should be, overall, more likely to be politically engaged (and hence to display some partisanship) than workers, who should be more likely to show lower levels of political engagement altogether. In fact, looking at predicted preferences, the probability of supporting Labour vs. not displaying party preferences is highest among socio-cultural professionals for almost all the range in tenure. Moreover, in terms of the unexpected finding for managers, it is important to point out that they are more likely to support Labour than socio-cultural professionals when tenure is over 17 years, which corresponds to relatively few observations.

As was the case for economic preferences, the three sets of comparisons capturing party preferences indicate that the association between tenure and partisanship appears to be stronger for managers (the average marginal effect of tenure is consistently statistically



**Figure 5.10: Average marginal effects of tenure on the probability of preferring the Labour Party vs. not preferring any party**



significant across the three pairs of comparisons), and for production workers (for which the average marginal effect of tenure is statistically significant in two of the comparisons). For the latter group, we find that the association between tenure and preferences is in the expected direction. Production workers with longer tenure are more likely to support Labour (instead of not preferring any party or supporting the Conservatives and Liberal Democrats). On the contrary, for managers the results run counter to our expectations, since tenure is positively associated with support for the Labour party. Nevertheless, we need to qualify this finding by pointing to the fact that, to start with, managers' baseline probability of supporting Labour is quite low (amongst the lowest of all classes). Hence, for almost all the range in tenure managers are less likely to support Labour (instead of the Conservatives or Liberal Democrats) than production workers, socio-cultural professionals and service workers. These results on the moderating role of class tenure in the association between class location and party preferences are also robust to alternative specifications of these models including additional controls for attained level of education, income and part-time employment (the results of these robustness checks are summarized in Appendix 5.E).

## Discussion

The analyses in this chapter challenge an assumption that is implicit in cross-sectional analyses of the association between social class and political preferences, that class effects are homogeneous across individuals independently of how long they have been in a specific class location. This chapter's contribution is to show that not all respondents are necessarily equally stable members of the class they are in at the time of being surveyed and that we should account for the moderating role of class tenure when studying the association between class location and political preferences. Both the literature on occupational socialization and class formation provide insights into the mechanisms through which class location comes to affect political preferences, and about how tenure is closely associated with these mechanisms. Class formation theory indicates that class location (as measured by market position) does not automatically translate into class attitudes and preferences. The process of perceiving that one's life prospects and employment risks are tied to those of a larger class, and adapting preferences accordingly is not automatic. Time can be an important moderator in this process. The literature on sociology of professions and occupations also suggests that socialization in the workplace is an ongoing process in adults' lives and, that as such, it entails a time dimension. Adults' values and attitudes are continuously affected by the social interactions they establish in the workplace, by the relationship to fellow workers or recipients of their work, as well as by the characteristics of the tasks carried out as part of their daily jobs.

After recognizing the theoretical relevance of class tenure, I introduced a measure to operationalize this concept based on longitudinal data from the BHPS. This measure of class tenure is defined as the uninterrupted time that a respondent has spent in a specific class location. Furthermore, I tested the moderating impact of tenure on different outcome variables. First, the results revealed a moderating role of tenure in the association between occupational class and economic preferences (about state intervention in the economy). Class differences in preferences were larger among respondents who were long-term incumbents in their classes than among new entrants. This moderating role, however, did not appear in the analysis of cultural preferences (measured by respondents' attitudes towards homosexuality). This could be the case because, as some studies have suggested, the association between class location and cultural values could be explained to a greater extent by selection rather than socialization mechanisms (Kohn & Schooler, 1982; Mortimer & Lorence, 1979). A similar argument has been put forward in some of the literature on post-industrial political conflict, with some authors arguing that class differences in libertarian versus authoritarian values are not the outcome of class position, but rather of

educational levels and field of education (Ivarsflaten & Stubager, 2013; Stubager, 2008). Since decisions on educational trajectories take place primarily prior to the beginning of employment careers, this would explain the weaker moderating effect of tenure. Another potential explanation is that the item capturing preferences over the cultural dimension, tolerance towards homosexuality, might be a value that is developed and crystallized at earlier stages in individuals' lives, and hence is less likely to be affected in the context of the workplace. Other issues pertaining to the cultural dimension of conflict, like attitudes towards immigration, could be more malleable along an individual's life and hence more likely to be affected by socialization in the workplace. In any case, the comparison to economic preferences provides an interesting result that could be expanded in future research and tested with alternative items.

On the economic dimension, it is interesting to find that the moderating impact of tenure on preferences was stronger for production workers and for managers, which represent the more traditional industrial classes characterized by stricter hierarchical relationships. This could suggest a greater probability of developing class consciousness in these classes, or at least of observing one's class interests in contrast to those of other classes and in common with fellow class members. A stronger association between tenure and preferences for production workers and managers was also revealed in the models studying party preferences. In this case, however, it is surprising to find that, against our expectation, managers with longer tenure were more likely to support the Labour party. This is especially unexpected considering that, for managers, there is a moderating role of tenure that reinforces opposition to state intervention in the economy. Hence, the findings on preferences do not match the findings on partisanship. This mismatch could be partly due to the influence of the supply side. As Evans and Tilley (2017) have indicated, although class differences in preferences persist in the UK, they are not reflected in party choice because the supply side (especially the Labour party) has increasingly catered to middle-class interests. This could explain part of these unexpected findings. Leaving aside this surprising result, overall, the analyses of party preferences indicate that, similarly to economic preferences, class differences in partisanship are greatest for individuals with longer tenure than for new entrants into a class.

This chapter provides new insights about the influence of social class in post-industrial societies, and complements the literature on labor market dualization that has focused on the conflict between insiders and outsiders and on how labor market instability directly affects political preferences. This chapter shares some of the theoretical underpinnings of this strand of research and, under the current operationalization of class

tenure, long-term class incumbents may overlap with the group of labor-market insiders identified in this literature. Individuals with standard employment contracts are probably more likely to display longer class tenure than individuals employed on a fixed-term contract. Nonetheless, the focus of the analyses conducted in this chapter and that of the dualization literature is clearly different (although not incompatible). By definition, class tenure is a measure of retrospective stability in class location. On the contrary, atypical employment attempts to capture prospective employment instability and the risk of becoming unemployed. Moreover, some of the changes that are here considered as interruptions in class tenure (like mobility between two classes) are not the focus of the dualization literature. Other than these dissimilarities in the kind of employment (in)stability studied, the crucial difference between these two approaches concerns, precisely, the role played by stability. In the dualization literature, the distinction between insiders and outsiders is expected to directly ground differences in economic preferences. Here, in contrast, I propose that class tenure does not have an unconditional effect on political preferences but rather that it acts as a moderator in the association between class location and preferences. Perhaps a similar approach could be implemented within the insider-outsider framework, by considering whether, not only labor-market outsiders differ in their policy preferences from insiders, but also whether the impact of class location on preferences differs for these two groups. Moreover, when comparing insiders and outsiders it would be interesting to assess whether short-tenured insiders are more similar to outsiders, and progressively diverge from them as tenure increases.

Going back to the metaphor of classes as an omnibus presented in the theory section, and to the idea of class as an anchor of political preferences, the results indicate that if all individuals had longer class tenure we would observe a stronger alignment between social and political divisions. For those individuals who are new entrants in a specific class location, class has a lower explanatory power on their preferences. Hence, class does not act as strongly as an anchor of preferences for them. However, if all individuals stayed in the bus longer, we would observe a greater prevalence of class-associated preferences and attitudes—especially for certain classes and dependent variables. Although the analyses of the moderating role of tenure were performed at the individual level, they suggest that societal changes in employment careers could have an impact on aggregate levels of class voting. The moderating role of class tenure on economic and party preferences indicates that if average levels of tenure decrease, overall levels of class voting will decrease as well. Clearly, class voting will not only depend on changes in tenure and structural changes, but also on parties' strategies for mobilizing classes and other contingent factors. Nevertheless,

the results presented here indicate how the structural transformations that societies underwent because of post-industrialization could contribute to the decay of class politics.



## Chapter 6

# The impact of intra-generational class mobility on economic preferences

### Introduction

Most research on class politics has been based on cross-sectional survey data. Hence, analyses of how class mobility affects political predispositions are scarce. The study of intra-generational class mobility appears especially pertinent in the context of greater instability in employment careers and weaker attachment to the labor market that characterizes advanced industrial economies (Davidsson & Naczyk, 2009; Emmenegger et al., 2012b; Murphy, 2014). Taking into account this instability in individuals' employment careers, in the previous chapter, I considered the relevance of permanence (or tenure) in a class as an important moderator in the association between class location and political preferences. In this chapter, instead of focusing on permanence and stability, I contribute to the literature on class voting by analyzing how intra-generational mobility relates to preferences on economic issues. Studying the political consequences of intra-generational class mobility does not only provide further insights about the mechanisms linking socio-structural factors and political preferences at the individual-level, but also about how, in the aggregate, class mobility might affect overall levels of class-based political conflict.

Although studies that consider the impact of class mobility on political predispositions are rather limited, there are different strands of research that inform our expectations about how class mobility during an individuals' employment career will be related to economic preferences. First, some studies have assessed how changes in individuals' socio-structural positions affect political preferences (Cavaille & Neundorf, 2016; Kohler, 2005; Margalit, 2013; Rehm, 2016; Sears & Funk, 1990). Many of these contributions have considered the impact of events that are closely related to class location, such as experiencing a reduction in income or becoming unemployed. The theoretical underpinnings of this strand of research are grounded on self-interest, and how it guides attitudinal responses to these socio-structural events. Secondly, to elaborate on the impact of intra-generational class mobility on preferences, I draw upon the literature that has addressed inter-generational mobility. This strand of research, as well as a recent account of the impact of class mobility on turnout (Lahtinen et al., 2017), build on the gradient constraint hypothesis, which compares the preferences of mobile individuals to those of the immobile. I draw on these different contributions to analyze how changes in individuals' class location affect their economic preferences.

One of the limitations of existing studies of class mobility is that they frequently adopt a unidimensional approach to measuring mobility, thus overlooking the complexity that characterizes the post-industrial occupational structure. In the analyses below I study intra-generational class mobility implementing Oesch's class scheme, which implies that individuals can move between class locations along two different dimensions: vertical, or horizontal. This increases the complexity of the analyses and the comparisons one can establish, but provides a better account of different occupational trajectories that we might find in post-industrial societies. In fact, the analyses in this chapter, based on the British Household Panel Survey (BHPS), indicate that not all patterns of mobility are equally associated with changes in economic preferences. These results provide support for the gradient constraint hypothesis, with some differences depending on the pattern of mobility under consideration.

In what follows, I first discuss the literature on the impact of socio-structural events and inter-generational mobility on preferences. In the next section I introduce the gradient constraint hypothesis and formulate the expectations about the political impact of intra-generational mobility. Next, the data and the research strategy to identify the impact of vertical and horizontal mobility are introduced, followed by the presentation of the main results. I conclude by discussing the implications of these findings.

### **Theoretical background and hypotheses**

Although numerous studies have considered the association between social class and political preferences, few have done so with a longitudinal approach at the individual-level (for one of these few examples see Kohler, 2005). There are, however, a number of contributions that have analyzed the impact of changes in the employment situation of the individual (such as losing one's job, or experiencing a reduction in earnings) on policy preferences, partisanship or electoral behavior (e.g. Cavaille & Neundorf, 2016; Margalit, 2013). At the same time, other analyses have explicitly dealt with class mobility, but they have predominantly focused on inter-generational mobility. Both approaches entail, either explicitly or implicitly, a role for self-interest in shaping political orientations.

Longitudinal research about how changes to an individual's economic position affect political preferences is based on the assumption that economic self-interest is a relevant antecedent of voters' attitudes on economic issues. This is a widespread assumption in political economy models that predict that people will support parties and politics that best represent their interests (Meltzer & Richard, 1981; Weeden & Kurzban, 2017). Many of these studies have indeed found that changes in voters' economic situation are related to changes in economic preferences, and that being exposed to greater economic risk (e.g.



experiencing a drop in income) increases support for redistributive policies and state intervention in the economy (Cavaille & Neundorf, 2016; Margalit, 2013). The relationship between class location, class mobility and political preferences might, however, go beyond mere self-interest. Although, by definition, social class captures differences in economic opportunities and prospects, Oesch's class scheme also captures differences in the kind of skills implemented in the job, and in the interactions and networks that are established in the context of it. Hence, in light of the mechanisms for the association between class location and political predispositions enounced in earlier chapters, which were based not only on economic prospects and opportunity but also on differences in daily work experiences and the interactions established in the context of the workplace, we expect class mobility along different dimensions to affect economic preferences.

The literature on class mobility, which has predominantly focused on inter-generational mobility, has, however, identified a certain constraint in the extent to which the preferences of the class mobile will change. Inter-generational mobility is defined by the class location that individuals occupy relative to the social class that their parents held. Because mobile individuals are exposed to the economic risks and opportunities associated with their current class location (class of destination) and also to the kind of job tasks and interactions that pertain to that class, it is expected that they will display preferences in line with their new class location. However, because social origin plays an important role in early political socialization, this literature also expects an effect of class of origin on political predispositions (De Graaf et al., 1995; De Graaf & Ultee, 1990; Weakliem, 1992). As matter of fact, most of these studies have found that the party preferences of inter-generationally mobile individuals are usually between those of the immobile in their origin and destination class. Hence there is a clear constraint in the impact of mobility. Although the class mobile adopt the preferences of their class of destination, there is a persistent impact of class of origin.

In one of the few studies that consider the political implications of intra-generational mobility, Lahtinen, Wass and Hiilamo (2017) build upon the notion of gradient constraint—as developed in the field of health inequalities—to formulate the gradient constraint hypothesis. Similar to the logic and the effects found in the inter-generational mobility literature, the starting point for this hypothesis is that individuals will move between social classes that differ in terms of political predispositions. The expectation is, then, that the mobile will differ in preferences with respect to their class of origin, but also with respect to their class of destination. In its formulation for the study of political participation Lahtinen et al. (2017) postulate that the upwardly mobile will be more likely

to vote than the immobile in their (lower) class of origin, but, at the same time, they will be less likely to vote than those in their (higher) class of destination. This gradient constraint hypothesis, which mirrors the arguments developed in the inter-generational mobility literature, is partially confirmed by their study of the Finnish case.

While the literature focusing on the impact of changes in employment status or conditions considered the effects of these changes on both party and economic preferences, most of the research on inter-generational class mobility focused almost exclusively on partisan preferences. However, in this latter strand of research, it is frequently assumed (either implicitly or explicitly) that the association between class mobility and party choice is mediated by changes in economic preferences. In contrast to other chapters in this dissertation, in the following analyses I exclusively focus on the association between class mobility and economic preferences. As I discuss in further detail below, studying mobility based on a bi-dimensional post-industrial class scheme entails a fair degree of complexity since multiple patterns of class change are possible. Hence, a comparison of support for different parties would further complicate the analyses and the presentation of the results. Moreover, as a difference from previous chapters, I restrict the analyses to preferences on economic issues because the BHPS allows for a better measurement of these attitudes (for which we find different survey items repeated across several waves of the panel) than of cultural attitudes (which can only be based on a single item tapping attitudes towards homosexuality).

Analyzing the political impact of class mobility was simpler with an industrial conception of the occupational structure that ordered classes along a single vertical dimension. With a uni-dimensional class scheme, occupational mobility (whether inter- or intra-generational) could only take place in one direction, either upward or downward. However, in post-industrial societies we need to take into account that mobility can take place along two dimensions. Other than vertical mobility, we also need to account for horizontal mobility between classes that display similar levels of marketable skills, but that are embedded in different work logics. Since mobility can be both vertical and horizontal, the number of transitions we can observe increases substantially. It is important to consider both forms of mobility because, as I have shown in earlier chapters, occupational classes differ in terms of preferences not only because of their relative vertical location in the occupational structure, but also because of their work logic. Regarding economic preferences, we observed that low- and unskilled workers showed greater preferences towards redistribution and state intervention in the economy than professionals, but also that respondents in the inter-personal service work logic were located towards the

redistributive pole (especially socio-cultural professionals) while respondents in the independent and organizational work logics displayed greater opposition to redistribution and state intervention.<sup>46</sup>

How will the class mobile compare to the immobile with regards to their economic preferences, when considering that individuals might change classes in a horizontal or vertical direction? Following the gradient constraint hypothesis, we can expect that, because of the changes that class mobility entails—such as the economic resources and risk associated with the new class location, the kind of skills at use in the new work sphere, as well as the networks and interactions established around it (Ashford & Nurmohamed, 2012; Mortimer & Simmons, 1978; Oesch, 2006b)—mobile respondents will resemble their class of destination. However, because there are traits in the class of origin that can sustain an influence over preferences—early socialization into a class and constructing a class identity can have enduring effects (Mortimer & Lorence, 1979)—established members of a class may be reluctant to adapt to the class of destination. Moreover some social groups may have a strong culture that lasts even if respondents move (Weakliem, 1992). Therefore, mobile individuals may not completely assimilate into their class of destination and might retain some resemblance to their class of origin. As a consequence, the mobile will display levels of economic preferences between those of the immobile in their class of origin and destination.

What does this entail for the specific forms of mobility? For vertical mobility the expectations are straightforward and mirror quite closely earlier studies on inter-generational mobility. Upwardly mobile respondents should be less supportive of state intervention in the economy and of redistributive policies than immobile workers in low and unskilled occupations, and more supportive of these policies than immobile professional workers. Conversely, downwardly mobile workers should become more supportive of state intervention in the economy and redistributive policies. In other words, upwardly and downwardly mobile workers are expected to display similar preferences, located between those of the immobile in lower- and higher-grade classes.

Because the association between social class and preferences is not merely based on economic prospects but it is also grounded on the kind of tasks and activities developed in the context of the daily work, on the hierarchical and authority structures that individuals

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<sup>46</sup> I do not elaborate further on the mechanisms behind the association between class location and preferences since this was presented in detail in chapters 1 and 2. Like in other chapters of the dissertation I build on the findings from chapter 2 to further investigate the individual-level relationship between class and preferences.

are embedded in, as well as on the orientation of the work, we can expect horizontal mobility to be similarly related to preferences as vertical mobility. However, when it comes to horizontal mobility, developing specific expectations is less straightforward since individuals can move between four work logics of origin and three logics of destination (i.e. a total of twelve possible transitions). Nevertheless, we can enunciate some general expectations taking into consideration that, in empirical terms, I operationalize horizontal mobility according to the work logic into which respondents move.

As discussed in detail in chapter 2, we first expect respondents in the independent work logic to be most opposed to redistribution and state intervention, since these respondents are characterized by being the owners of capital. Hence, entering this work logic should promote more right-wing economic preferences. We also expect those entering the organizational work logic to become more favorable towards market solutions instead of state intervention, since occupations in this logic are embedded in bureaucracies with a clear career ladder, and the work is mainly oriented towards the employing organization. On the contrary, we expect workers and employees entering the inter-personal work logic to become more supportive of state intervention, because their work is oriented to other people, especially to the clients, patients, and recipients of their work. Entering the technical work logic should have an impact in preferences between that of the inter-personal and the organizational work logics.

In chapter 2, we saw that classes differed in economic preferences according to work logic (with some variation depending on whether the comparison was established between higher- or lower-grade classes). Therefore, we expect horizontally mobile individuals to change their preferences in line with their work logic of destination. However, taking into account the gradient constraint hypothesis, mobile individuals should still hold more moderate preferences than the immobile in the destination class. For example, although those entering the organizational or the independent work logic should display more economically right-wing preferences than their class of origin, they should still be more supportive of redistribution and state intervention than the immobile in the organizational and independent work logic (which should display more extreme preferences). Similarly, professionals and workers entering the inter-personal service or technical work logic should be less supportive of state intervention than their destination class, but more so than immobile workers in the organizational or independent work logic. In short, as with vertical mobility, we expect mobile individuals to hold more moderate preferences than the immobile in the class they are entering or exiting.

Even though most of the existing evidence has tended to favor the gradient constraint hypothesis, the literature on status inconsistency and social disintegration (Blalock, 1967), and the extremism effect (Blau, 1956), suggest an alternative expectation. These two theories apply specifically to vertical mobility and they contend that mobility can be experienced as a major shock (especially downward mobility) and a source of insecurity, which can lead to extreme or 'abnormal' political behavior. As a consequence, the influence of mobility on preferences is such that the mobile 'surpass' their class of destination. Empirically, this would mean that individuals experiencing downward mobility should show greater support for redistribution and state intervention than the workers who have been immobile in the lower-grade classes they move into (i.e. the class of destination). Although these hypotheses have been mainly elaborated around downward mobility, the discordance to which mobile individuals are subject could also affect the upwardly mobile. It is not so clear whether this logic could be extended to horizontal mobility, since the mechanism behind it is based on the status associated with different classes, which is a clear correlate of vertical class location but not of work logic.

As I discussed in the previous chapter, studying class location from a longitudinal perspective at the individual level allows us to contribute to the debate of whether class effects occur through selection or socialization into an occupation. Longitudinal analyses in the occupational socialization literature pointed to a reinforcement effect, with personality traits and attitudes guiding choice of occupation, and these traits being reinforced by socialization in the context of the workplace (Mortimer & Simmons, 1978). The analyses in the previous chapter, which focused on stability within a specific class location, could not directly test the presence or absence of selection effects, but provided some evidence in favor of socialization (or, at least, reinforcement effects). In this chapter, although I am not able to disentangle selection and socialization effects, I contribute to a better understanding of the extent to which these mechanisms are at work by establishing comparisons between mobile and immobile individuals. If we observe that immobile individuals in different classes differ strongly in terms of preferences, but mobility is only weakly associated with changes in preferences, then this would indicate that socialization is weak and that class differences are mostly grounded on selection mechanisms. If, instead, social mobility is also related to different preferences, this would suggest that some socialization (or reinforcement) effects are at work. Given the results from the previous chapter we expect to find evidence of socialization.

## Data and methods

Like in the previous chapter the analyses in this chapter rely on data from the BHPS. This survey includes longitudinal information on respondents' employment status and occupation, which allow for the operationalization of Oesch's class scheme, as well as items tapping economic preferences. To have a sample comparable to the one used in the previous chapter, I restrict it to men and women of working age (16 to 64) who are British nationals. As in chapter 5, to measure preferences on economic issues I rely on four of the six items capturing economic preferences included in waves 1, 3, 5, 7, 10, 14 and 17 of the panel. These are the four items that relate more directly to attitudes on economic and social policy, and that load on the same factor.<sup>47</sup> The outcome variable is an index that takes the average values of the four questions, which were measured using the same scale (from 1 to 5), for each respondent. Higher values in this index indicate opposition to state intervention and redistributive mechanisms.<sup>48</sup>

The purpose of this chapter is to analyze whether intra-generational class mobility (vertical or horizontal) is associated with different economic preferences. Hence, to operationalize class mobility we need to observe whether an individual has changed her class location over time. Occupational class is measured by means of Oesch's eight-class scheme, which assigns occupations into two vertical levels depending on the level of marketable skills of the occupation (low- and unskilled workers vs. professional workers), and into four different work logics (technical, inter-personal service, independent and organizational). Class mobility is defined as a change in class location (within Oesch's scheme) between two waves of the panel, which are the time points at which class location and economic preferences are measured. The analyses below rely on two slightly different approaches to coding class mobility, because of differences in how random-effects and fixed-effects models are estimated. As I discuss in further detail below, the first part of the analyses relies on random-effects models to study the relationship between mobility and economic preferences. In a second step in the analyses I also fit individual fixed-effects models.

Because the items measuring economic preferences are not included in every wave of the panel, the comparison of class location of the respondent is between the waves that include these items. In other words, I compare the class location of the respondent at time  $t$ , to the class location of the same respondent in the last round that the economic preferences were measured. Based on this comparison I operationalize a set of indicators

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<sup>47</sup> The factor analyses of these different items are included in Appendix 5.B.

<sup>48</sup> Details on the operationalization of all variables can be found in the Appendix 6.A.

that capture class mobility. For vertical mobility, and since I rely on Oesch's simplified eight-class scheme, I code upward mobility if a respondent moved from a low- or unskilled occupational class (independently of the work logic that this class belongs to) into a professional class. When change in class location is in the opposite direction I code this as downward mobility. Additionally, I separate vertically immobile respondents by whether they hold a higher- or lower-grade class location. As I discuss below, this distinction between immobile workers in different locations is fundamental to test the gradient constraint hypothesis.

Coding horizontal mobility is more complex since there are four different work logics between which respondents can move: the independent work logic (which includes large employers and self-employed professionals, and small business owners); the organizational work logic (which includes managers and office clerks); the inter-personal service work logic (which includes the socio-cultural professionals and service workers); and the technical work logic (which includes the technical professionals and production workers). If we were to code one indicator for each of the different patterns of horizontal mobility this would leave us with 12 (4x3) different indicators. This type of operationalization would not only increase the complexity and the interpretation of the results, but would also be problematic because there would be too few observations in some of these transitions. To facilitate the estimation and interpretation I code horizontal mobility as entrance into a specific work logic (independently of the work logic of origin). I hence code four different indicators, one for entrance into the technical work logic, one for entrance into the inter-personal service work logic, one for entrance into the organizational work logic, and the fourth one for entrance into the independent work logic. As with vertical mobility, I further differentiate immobile respondents by the work logic that they are immobile in, which leaves us with an eight-category measure of horizontal mobility: (1) immobile in the technical work logic, (2) mobile into the technical work logic, (3) immobile in the inter-personal service work logic, (4) mobile into the inter-personal service work logic, (5) immobile in the organizational work logic, (6) mobile into the organizational work logic, (7) immobile in the independent work logic, and (8) mobile into the independent work logic.

Since mobility between classes can be either vertical, horizontal, or both, to simplify the comparisons and the interpretation of the models, I study vertical and horizontal mobility separately. Nevertheless, the estimations that focus on vertical mobility include horizontal mobility as a control, and the models studying horizontal mobility include vertical mobility as a control. As it was made clear above, when discussing the gradient

constraint hypothesis, the preferences of mobile workers are analyzed in relation to the preferences of their class of origin or destination. For this reason, it is also necessary to separate immobile respondents according to the vertical or horizontal class location that they hold.

The analyses below proceed in two steps. First, I estimate the association between mobility and economic preferences through a series of random-effects models. The first two models are additive models that include as explanatory factors the vertical and horizontal mobility variables described above. The next models include interactions between two indicator variables for whether the respondent has experienced any vertical or horizontal mobility (one variable for each kind of mobility) and their class of origin and destination (see below).<sup>49</sup> Since these models are estimated on longitudinal data with several observations for each individual, random-effects models will estimate the association between mobility and economic preferences by considering both between- and within-individual variation in these variables. In these models, I include as control variables the age and gender of the respondent, as well as wave- and region fixed-effects.

In a second step, the additive models are re-estimated as fixed-effects models. The advantage of implementing fixed-effects regression models on longitudinal data is that individual respondents serve as their own control. In other words, these models estimate the association between mobility and preferences by relying solely on within-individual variation. By doing so these models relax the assumption that time-invariant characteristics of the individual (both observed and unobserved) are independent of all the explanatory variables. In fixed-effects models all observed and unobserved variables (that are individual-specific and constant over time) are treated as fixed parameters. Fixed-effects models do, however, produce larger standard errors than random-effects models.

Random- and fixed-effects models do not just differ in the estimation process. There are some substantive issues that we need to consider in the comparison of these two estimations. Because fixed-effects models are based on within-individual variation only, the estimates of the association between mobility and preferences are based on individuals that do experience mobility. All individuals who are consistently class immobile along the panel do not contribute to the fixed-effects estimation since, within these individuals, class mobility is not a variable but a constant. Thus, the sample that contributes to the estimation of the fixed- and random-effects models is slightly different. While immobile respondents

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<sup>49</sup> Vertical mobility is coded as 1 if the respondent moved either upward or downward (and 0 if he remained immobile). Likewise, horizontal mobility is coded as 1 if the respondent moved into a different work logic, and 0 otherwise.



that do not experience any form of mobility contribute to the comparison of mobile and immobile respondents in the random-effects models, these individuals do not contribute to the estimation of the fixed-effects models. Substantively, this means that in fixed-effects models differences in preferences are not studied for immobile and mobile individuals generally. Instead, fixed-effects models establish within-individual comparisons of preferences for individuals who experience mobility at some point during the panel. In other words, it compares the preferences of an individual who has been mobile, to the preferences he or she holds when immobile. This difference between random-effects and fixed-effects models also has substantive implications to test the gradient constraint hypothesis. Since this hypothesis is based on the overall comparison between mobile and immobile individuals, the random-effects models are a better test of it. The fixed-effects models, however, can provide greater insights into the individual-level impact of mobility, because they do not just compare levels of preferences across different groups but estimate average differences in preferences within individuals before and after they have experienced mobility.

How mobility is coded differs slightly in the two estimations, first because the logic of the estimation is different and secondly, because since fixed-effects models are solely based on within-individual variation, the coding for these models attempts to maximize the number of observed individuals that change class location across time (i.e. it minimizes the number of missing observations for the variable mobility). Mobility is always coded based on the two variables mentioned above (one with four response categories for vertical mobility, and another one with eight response categories for horizontal mobility) but differs in the time comparisons that are established. The coding for the random-effects models is the most straightforward because the comparison is always established between subsequent waves (the two most proximate waves in time when considering only those in which economic preferences are measured).<sup>50</sup> Respondents who have changed classes in adjacent waves are coded as mobile in the corresponding dimension, those who have not changed are coded as immobile, and all those for which information on class location is missing in one of the rounds are coded as missing. For the fixed-effects models the coding is slightly different, and follows Kohler (2005). Because these models are estimated based on within-individual variation, and to maximize the number of respondents with observed mobility, the comparison is not only established between subsequent waves but, if information on one of the waves is missing, it also takes into account information from

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<sup>50</sup> Because economic preferences have been measured in alternate waves this does not correspond to subsequent waves of the panel.

previous rounds. For example, if a respondent is in the managerial class at time  $t$ , information on occupational class was missing at  $t-1$ , but she was a technical professional at time  $t-2$ , she is coded as having experienced horizontal mobility at time  $t$  (while this was not the case for the random-effects model where it is coded as a missing observation). In any case, estimating the random-effects models on the fixed-effects coding provides similar results as those presented below. It is also important to remark that, like in the previous chapter, occupational class is coded as missing for respondents who are not employed at the time they are interviewed (because they are out of the labor market, unemployed, in full-time education or any other situation).

## Results

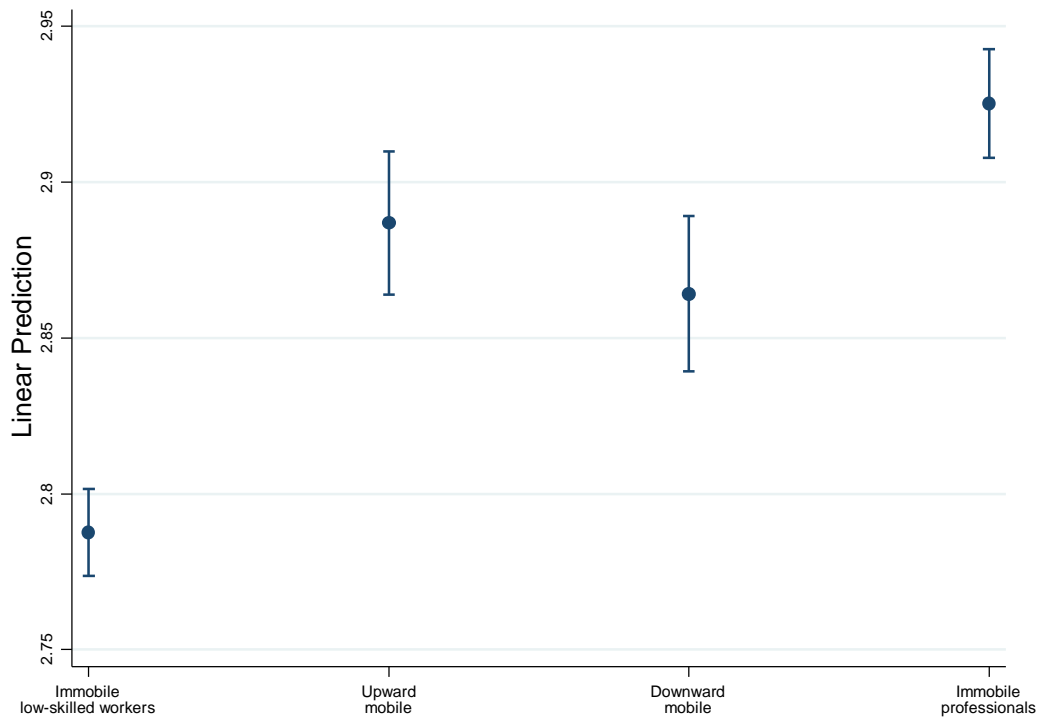
The first models estimate how individuals who have experienced vertical mobility (either upward or downward) differ in economic preferences from those who have not experienced mobility. Figure 6.1 presents predicted levels of economic preferences for different vertical mobility groups as estimated from a random-effects model. This model includes additional controls for horizontal mobility, gender, age, wave fixed-effects and region fixed-effects.<sup>51</sup> In figure 6.1, the estimate for upward mobility summarizes the average economic preferences of respondents who have moved from a low- and unskilled class to a semi-professional or professional class. The estimate of downward mobility summarizes the preferences of those who have moved from a semi-professional or professional class to a low- or unskilled class.

As hypothesized, respondents who have experienced upward mobility are less supportive of redistribution and state intervention in the economy than their lower-grade class of origin. Correspondingly, those experiencing downward mobility are more supportive of redistribution and state intervention than their higher-grade class of origin. The gradient constraint hypothesis appears to be confirmed by these results. Mobile respondents' preferences are located between those of immobile workers in their class of origin and destination. While immobile low- and unskilled workers are the most likely to favor redistribution and state intervention in the economy (2.79 points in the 1 to 5 scale), immobile professionals are the most favorable to market solutions (2.93 points on the scale). The economic preferences of the upward and downward mobile are located between these two groups, hence showing more moderate preferences. For example, those entering the professional class (upward mobile) are more supportive of state intervention than those who are immobile in the professional class. Table 6.1 presents the coefficients for the

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<sup>51</sup> The estimated coefficients and standard errors from this model are presented in Model 1 in Appendix 6.B.

**Figure 6.1: Predicted economic preferences by status of vertical (im)mobility (estimated from random-effects models)**



comparisons or contrasts between the different groups (with their corresponding levels of statistical significance). This table indicates that the difference in preferences between upward and downward mobile workers is not statistically significant at conventional levels, while the differences between either of these two groups and their classes of origin and destination, or between the immobile in higher- and lower-grade classes are significant at least at the 0.01 level. The difference in preferences between immobile respondents in the upper and lower classes amounts to 0.21 standard deviations of the dependent variable, while in the comparison between the upwardly mobile and the low-skilled immobile this difference amounts to about 0.15 standard deviations of the dependent variable. The size of these differences appears as small, although it is comparable to the difference in economic preferences between men and women or to the difference associated with 20 years of age. Unfortunately, the absence of similar studies does not allow us to compare these coefficients to results from existing research.

**Table 6.1: Coefficients from random-effects models for the differences in preferences between statuses of vertical (im)mobility (coefficients indicate the difference between the column status and the row status)**

	Low-skilled workers (imm.)	Upward mobile	Downward mobile	Professionals (imm.)
Low-skilled workers (imm.)		0.099***	0.077***	0.138***
Upward mobile			-0.023	0.038**
Downward mobile				0.061***
Professionals (imm.)				

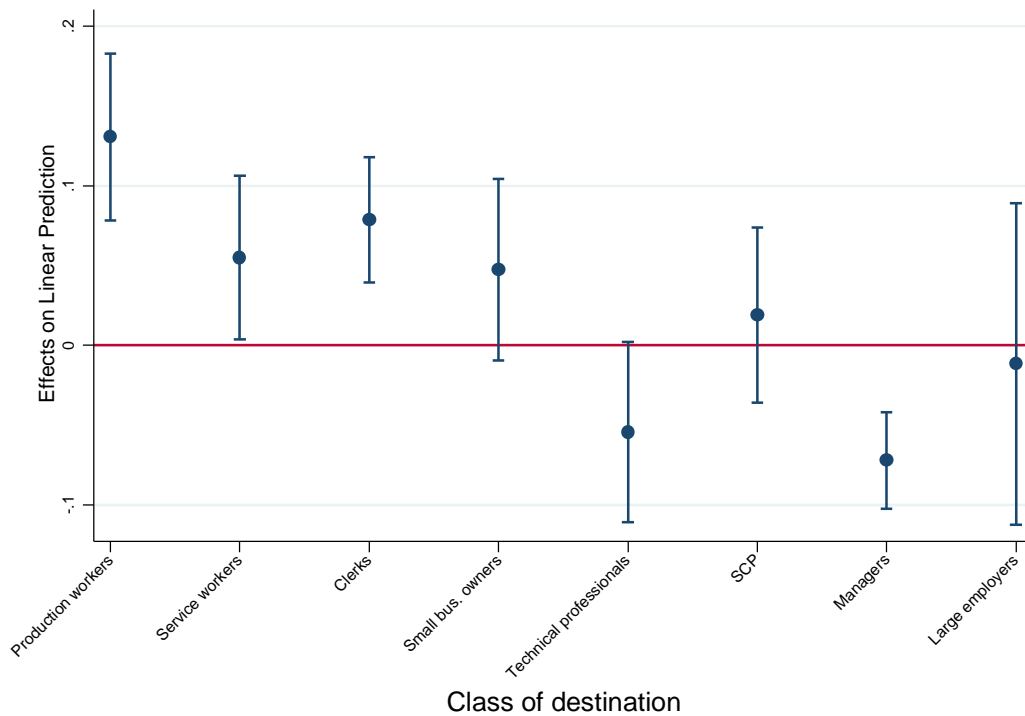
*Note:* Because the coefficient matrix is anti-symmetrical only the coefficients of the upper triangle are presented)  
 \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

As an alternative to this specification, I fit two additional models with an interactive term between a binary variable indicating whether the respondent has experienced any vertical mobility (upward or downward) and, first, the class of destination and, then, the class of origin. This alternative specification with interactive models allows us to look in greater detail at mobility in and out of specific occupational classes. The two graphs below show average marginal effects of mobility by each of the occupational classes of destination (figure 6.2) and origin (figure 6.3).<sup>52</sup> These models do not include horizontal mobility as a control variable because by introducing interactive terms with the class of destination and origin we already take into consideration the work logic that mobile individuals have moved into or away from (respectively). The estimated coefficients in these figures should be interpreted as the average difference in preferences between individuals in a class who have experienced vertical mobility (vertical mobility=1) and individuals in that class who have not experienced mobility (vertical mobility=0), in figure 6.2 this comparison refers to the class of destination and in figure 6.3 to the class of origin. An illustrative example can facilitate the interpretation: in figure 6.2 the estimate for production workers indicates the average difference in preferences between individuals who are currently production workers and have experienced vertical mobility, and respondents who are currently production workers and have been immobile in this class. Since the destination class is production workers, mobile workers into this class can only come from a professional class, hence, vertical mobility for them has been downward.

Figure 6.2 summarizes average marginal effects of vertical mobility for each of the classes of destination. Since mobile workers are compared to their current class (destination), for higher-grade classes individuals can only have experienced upward

<sup>52</sup> These average marginal effects are based on the random-effects models that can be found in Models 5 and 6 in appendix 6.B.

**Figure 6.2: Average marginal effects of vertical mobility by class of destination (estimated from random-effects models)**



mobility, and for lower-grade classes individuals can only have experienced downward mobility. Similar to the results in figure 6.1 and table 6.1, these results indicate that respondents who experienced downward mobility into low- and unskilled classes (production workers, service workers, office clerks and small business owners) show more right-wing economic preferences than immobile workers in those classes. The coefficient is, however, not statistically significant for small business owners. As we saw in earlier chapters, this class is (on average) closer to the professional classes in economic preferences than all other low- and unskilled classes, so it is reasonable to find that those downwardly mobile into this class do not differ by much from the immobile in this class. For the professional classes (technical and socio-cultural professionals, managers, and self-employed professionals and large employers) we find coefficients of the opposite sign (except for socio-cultural professionals), indicating that the upwardly mobile respondents who move into these classes are more economically left-wing than the immobile professionals. This, again, is in line with the hypothesis that mobile individuals will show preferences mid-way between their class of origin and destination. However, among the professional classes, many of these coefficients do not reach conventional levels of statistical significance.

**Figure 6.3: Average marginal effects of vertical mobility by class of origin (estimated from random-effects models)**

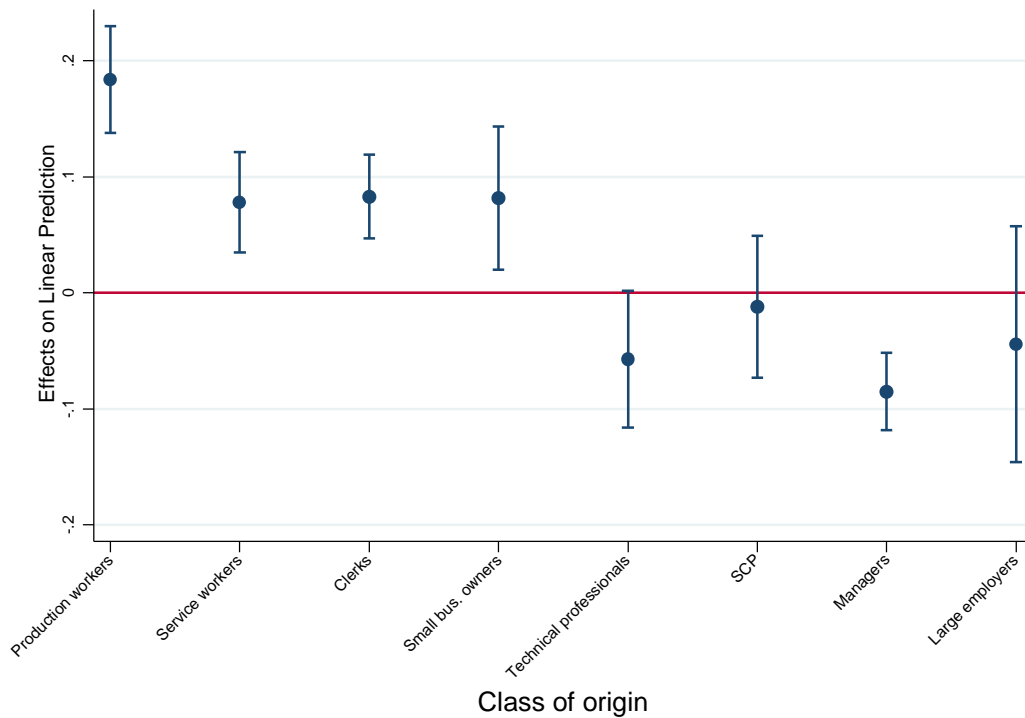
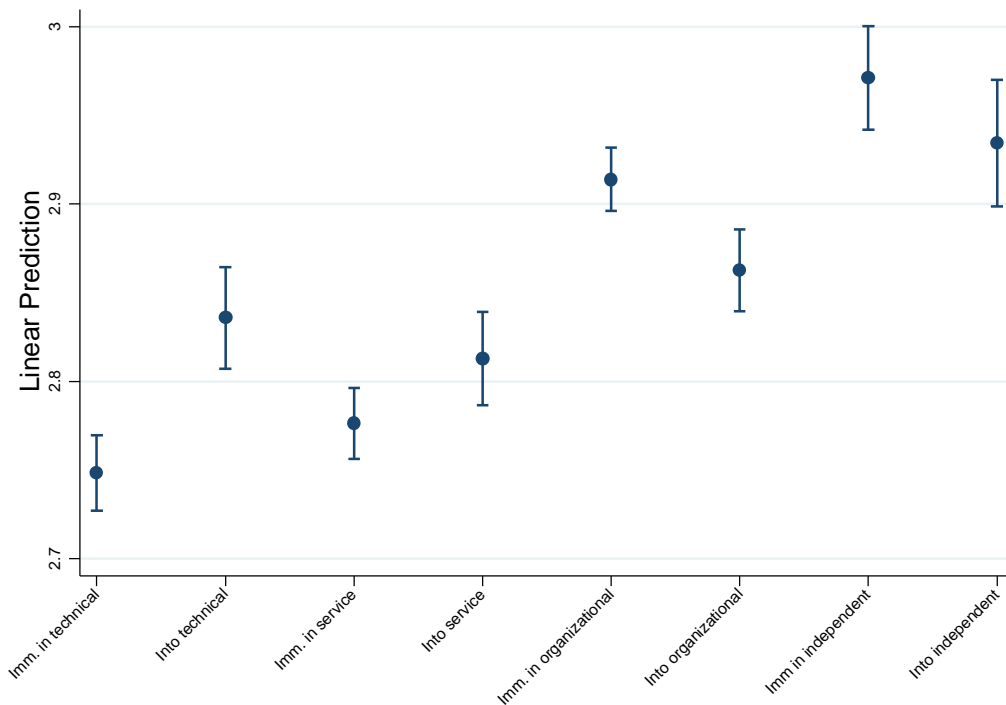


Figure 6.3 presents the interactions between mobility and class of origin. Notice that, because the comparison is now established with the class of origin, the interpretation is slightly different. For the low- and unskilled classes, the average marginal effect of mobility indicates the difference in preferences between those individuals who experienced upward mobility from one of the low- and unskilled classes and those who remained immobile in those classes. For these groups, the coefficients take on a positive value, indicating that the upwardly mobile are more economically right-wing than immobile workers. This coefficient is higher for production workers, and of similar size for the other three classes. For higher-grade classes, the average marginal effect of mobility indicates the difference in preferences between those individuals who experienced downward mobility from one of the professional classes and those who remained immobile in a professional occupation. As in figure 6.2, the coefficient for self-employed professionals and large employers is again not statistically significant, which could be due to the lower number of observations in this class. For socio-cultural professionals, the coefficient is also not statistically significant. This could be due to socio-cultural professionals displaying economic preferences close to those of workers, hence the differences between mobile and immobile socio-cultural professionals should not be large because the class of origin and

**Figure 6.4: Predicted economic preferences by status of horizontal (im)mobility (estimated from random-effects models)**



destination are more similar in terms of preferences. For technical professionals, the coefficient also falls short of statistical significance. Only for managers we find a statistically significant and negative coefficient, indicating that managers who experienced downward mobility into a low-skilled class are, on average, more left-wing than immobile managers.

Taken together, the results shown in figures 6.2 and 6.3 provide support for the hypothesis that while economic preferences change as a result of class mobility, the preferences of mobile individuals are located between those of their class of destination and origin. That is, there is some adaptation of preferences to the class of destination but, at the same time, part of the preferences of the class of origin are maintained. Moreover, when we study the association between mobility and preferences separately by class of origin and destination we find that the differences with respect to low-skilled classes are larger than with respect to professional occupational classes. In fact, most of the comparisons of the mobile with respect to their professional class of origin or destination fall short of reaching conventional levels of statistical significance.

After having considered the association between different patterns of vertical mobility and economic preferences, as estimated from random-effects models, Figure 6.4

addresses horizontal mobility. This figure presents predicted levels of economic preferences for mobile individuals who have moved into the four different work logics, as well as for immobile individuals who have remained immobile in each of them.<sup>53</sup> As in the case of vertical mobility, the horizontally mobile display different preferences from the immobile. Predicted levels of economic preferences present two different patterns. For the organizational and the independent work logic, which generally display preferences more opposed to state intervention and redistribution, respondents who are immobile in those work logics display more right-wing preferences than those who are new entrants into that logic. The opposite is true for the inter-personal service and technical work logics. Because respondents in these work logics hold preferences more favorable towards redistribution and state intervention, the newly entrants are economically more right wing than immobile workers in this logic.

Table 6.2 presents the coefficients summarizing the differences between mobile and immobile respondents with their corresponding levels of statistical significance. The differences in preferences based on horizontal mobility are similar to those found on vertical mobility, e.g. the difference between respondents who have moved into the technical work logic and the immobile in that work logic is of roughly 0.13 standard deviations in the measure of economic preferences. This is, however, the largest difference when comparing within the same work logic. Although, overall, the results favor the gradient constraint hypothesis, some of the differences in economic preferences between the mobile and the immobile do not reach conventional levels of statistical significance.

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<sup>53</sup> The coefficients (and standard errors) from this model are presented in Model 3 in Appendix 6.B.

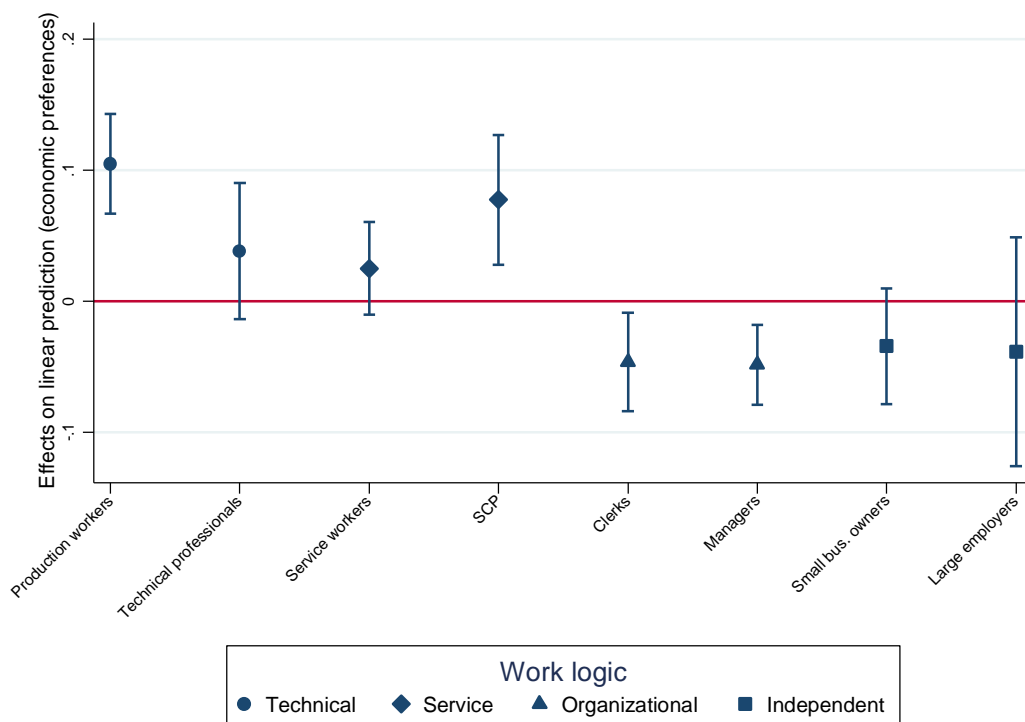


**Table 6.2: Coefficients from random-effects models for the differences in preferences between statuses of horizontal (im)mobility (coefficients indicate the difference between the column status and the row status)**

	Imm. in technical	Into technical	Imm. in service	Into service	Imm. in organizational	Into organizational	Imm. in independent	Into independent
Imm. in technical		0.087***	0.028+	0.064***	0.165***	0.114***	0.223***	0.186***
Into technical			-0.059***	-0.023	0.078***	0.027	0.135***	0.099***
Imm. in service				0.036*	0.138***	0.086***	0.195***	0.158***
Into service					0.101***	0.050**	0.158***	0.122***
Imm. in organizational						-0.051***	0.057***	0.021
Into organizational							0.108***	0.072***
Imm. in independent								-0.037+
Into independent								

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

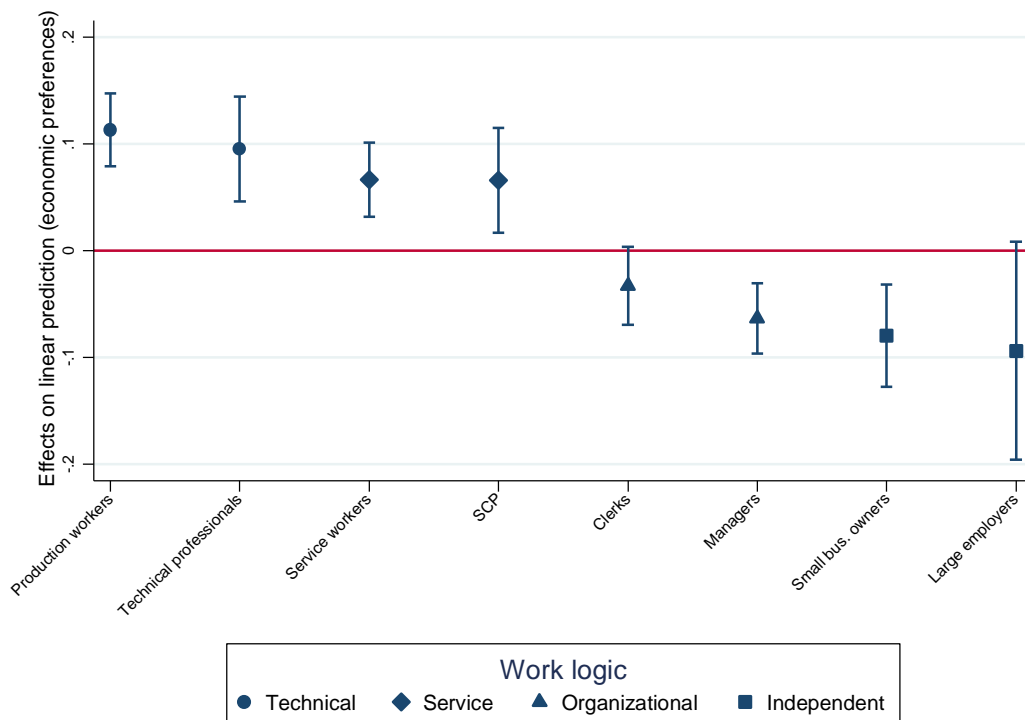
**Figure 6.5: Average marginal effects of horizontal mobility by class of destination (estimated from random-effects models)**



Like in figures 6.2 and 6.3, figures 6.5 and 6.6 present average marginal effects of horizontal mobility for each of the eight occupational classes of destination and origin as estimated from random-effects interactive models.<sup>54</sup> In figure 6.5 each of the plotted coefficients indicates the average difference in preferences between an individual who has moved into each class of destination by moving horizontally from a class in a different work logic. For instance, the coefficient for production workers indicates the average difference in preferences between current production workers who have been immobile in that class, and mobile individuals coming from a different work logic. Because the destination class (production workers) is within the technical work logic, mobile individuals can come from either of the other three work logics (the inter-personal service, the organizational or the independent logic). Figures 6.5 and 6.6 indicate that horizontal mobility is not significantly associated with differences in preferences for all classes. Regarding the class of destination (figure 6.5), the coefficients are significant for production workers, socio-cultural professionals, office clerks, and managers. For the first two classes, newly entrants into the class are more economically right-wing than stable occupants of that class, while for the

<sup>54</sup> The full models are presented in Models 7 and 8, in Appendix 6.B.

**Figure 6.6: Average marginal effects of horizontal mobility by class of origin (estimated from random-effects models)**



latter two the opposite is true. This difference is in line with what we would expect from the gradient constraint hypothesis, since respondents who move into classes more supportive of state intervention have more moderate preferences than immobile respondents in that class, and the same occurs for individuals who move into work logics more opposed to state intervention.

Figure 6.6 should be interpreted similarly to figure 6.5, although establishing comparisons with the class of origin. Each of the plotted coefficients in this figure indicates the average difference in preferences between an individual who moved away from a given occupational class of origin by moving horizontally into a class with a different work logic. A greater number of the average marginal effect coefficients reach conventional levels of statistical significance in this specification. Only for office clerks, and large employers and self-employed professionals we find that differences between mobile and immobile individuals are not statistically significant. This figure also supports the gradient constraint hypothesis. For the two work logics characterized by greater support for state intervention (the technical and the inter-personal service logics, on the left side of the plot), individuals who move out of either of these two logics display preferences more opposed to state

intervention. The opposite is true for the two work logics that favor market solutions (the organizational and independent work logics, on the right side of the plot).

Overall, the results from the different additive and interactive models analyzing vertical and horizontal occupational mobility provide support for the gradient constraint hypothesis, since mobile respondents differ from stable members of the occupational class that they moved out of, but they also do not show the same preferences as those of the occupational class they moved into. This entails that respondents who have experienced mobility (either vertical or horizontal) are more similar in their preferences to other mobile individuals. In contrast, if we just compare immobile individuals we find that differences in preferences are larger.

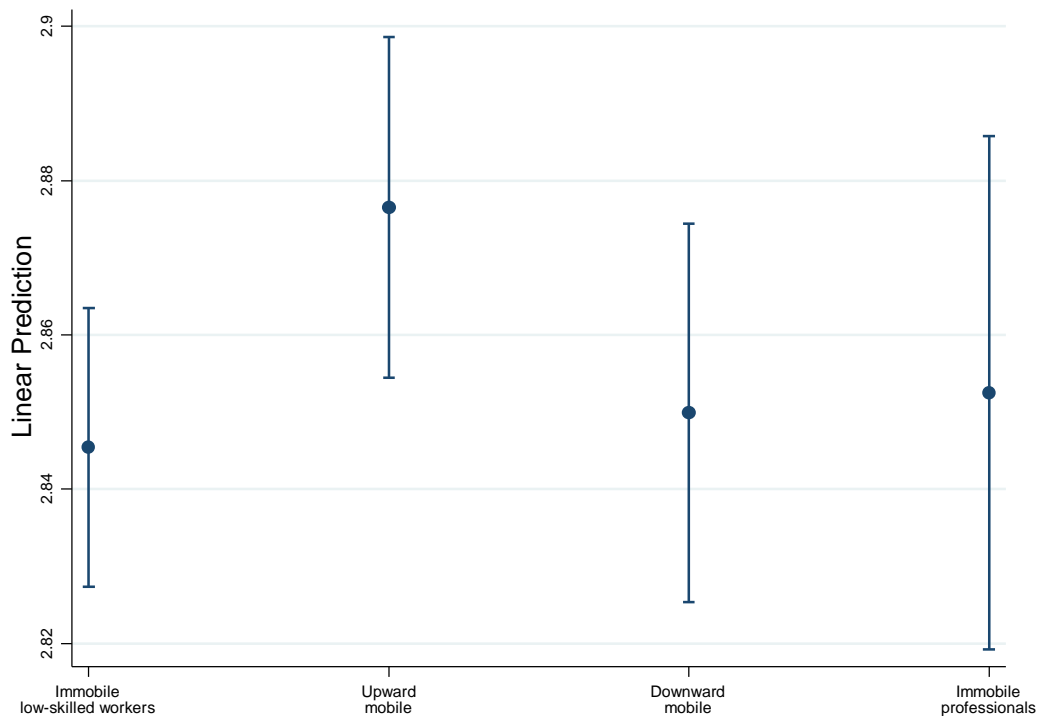
To probe further into the association between class mobility and economic preferences I estimate fixed-effects regression models equivalent to the models summarized in figures 6.1 and 6.4.<sup>55</sup> The interpretation of the results of these fixed-effects models is, however, different from the random-effects models, since they are estimated only taking into account within-individual variation in mobility and preferences. As a consequence, we should interpret the comparison between mobile and immobile respondents as the differences in economic preferences of respondents before experiencing mobility and after experiencing it. This is so because respondents who do not experience any intra-generational class mobility during the time that they are included in the panel do not contribute to the estimation of this effect, since there is no within-individual variation in mobility for them. These models can provide further insights into the mechanisms linking class mobility to changes in economic preferences. However, they are not a direct test of the gradient constraint hypothesis since this hypothesis refers more generally to differences in preferences between mobile and immobile workers.

Figure 6.7 presents predicted economic preferences from a fixed-effects model on vertical mobility. This model accounts for all observed and unobserved characteristics of respondents that are time-invariant. Hence, the only control variables introduced are age, and wave- and region-FE. Figure 6.7, and the results summarized in table 6.3, indicate that respondents who move upward in the class scheme become significantly more opposed to redistribution (in comparison to when they were immobile in a lower-grade class). This group appears as even more opposed to redistribution than immobile professionals, which would be in line with the extremism hypothesis. However, the difference between the upward mobile and immobile professionals does not reach conventional levels of statistical

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<sup>55</sup> The coefficients and standard errors from the fixed-effects models are presented in Models 2 and 4 in Appendix 6.B

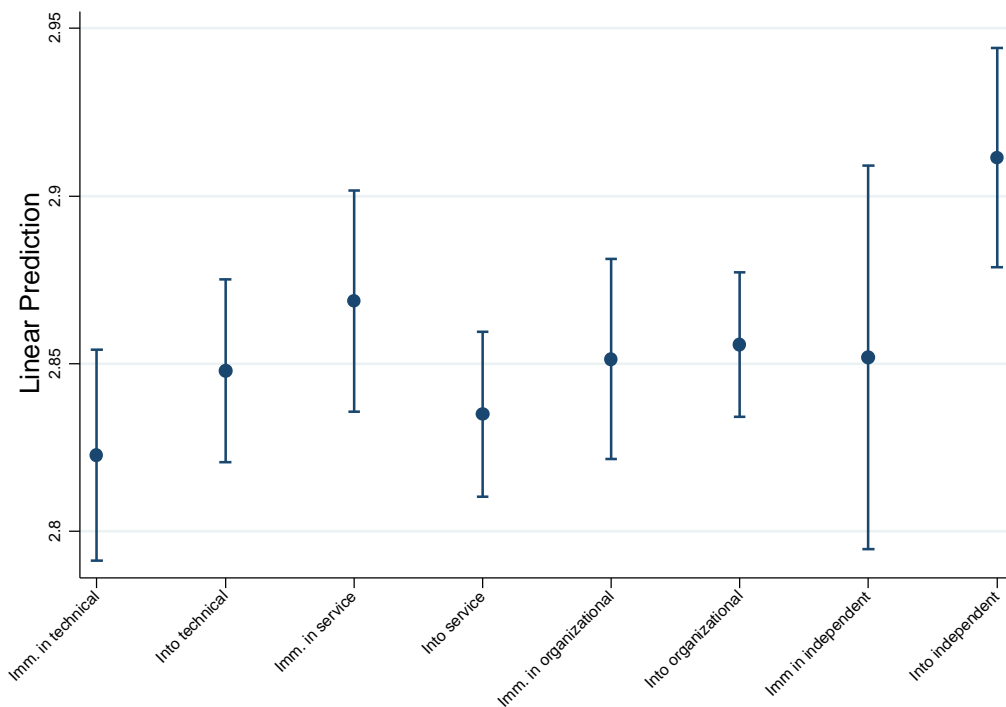
**Figure 6.7: Predicted economic preferences by status of vertical (im)mobility (estimated from fixed-effects models)**



significance (as summarized in table 6.3). In this case, the differences in preferences between workers (before experiencing mobility), the downward mobile, and the professionals (before experiencing mobility) are considerably smaller than in figure 6.1. In fact, table 6.3 makes clear that some of the differences that were statistically significant in the random-effects model do not reach conventional levels of significance when we focus exclusively on within-individual variation. Nevertheless, it is interesting to find that precisely the upward mobile become more opposed to redistribution (this result is statistically significant at conventional levels). This would appear in line with some arguments in the inter-generational mobility literature that have hypothesized asymmetric effects of mobility (Weakliem, 1992). Specifically, some authors have argued that upward mobility may have a stronger effect on preferences because individuals are more prone to adopt more prestigious identities, while individuals who move downward are more resistant to adapting to a less prestigious status (see Parkin, 1971; and Wilensky and Edwards, 1959 in Weakliem, 1992, p. 154).

Figure 6.8 also summarizes predicted economic preferences from fixed-effects models, in this case depending on experiences of horizontal mobility. As with vertical

**Figure 6.8: Predicted economic preferences by status of horizontal (im)mobility (estimated from fixed-effects models)**



mobility, we find that the results from the fixed- and random-effects models differ. As table 6.4 indicates, many of the comparisons between horizontal mobility groups do not reach conventional levels of statistical significance. For instance, in contrast to the random-effects model, in this specification respondents who have moved into the inter-personal service work logic do not significantly differ from respondents who have been immobile in that work logic. It is, nevertheless, interesting to find that the differences that are consistently statistically significant concern respondents who move into the independent work logic. As expected, these respondents appear to be more opposed to redistribution than respondents who have moved into other work logics, and than immobile respondents in other work logics. Workers and employees in the independent work logic should be the most opposed to redistribution and state intervention (within their vertical level of marketable skills) because these two classes are characterized by being the owners of capital. Although we would have also expected to find differences with respect to employees and workers in the organizational work logic, this is not the case when we focus only on within-individual variation in class mobility estimated through fixed-effects models.

**Table 6.3: Coefficients from fixed-effects models for the differences in preferences between statuses of vertical (im)mobility (coefficients indicate the difference between the column status and the row status)**

	Low-skilled workers (imm.)	Upward mobile	Downward mobile	Professionals (imm.)
Low-skilled workers (imm.)				
Upward mobile		0.031*	0.005	0.007
Downward mobile			-0.027*	-0.024
Professionals (imm.)				0.003

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

**Table 6.4: Coefficients from fixed-effects models for the differences in preferences between statuses of horizontal (im)mobility (coefficients indicate the difference between the column status and the row status)**

	Imm. in technical	Into technical	Imm. in service	Into service	Imm. in organizational	Into organizational	Imm. in independent	Into independent
Imm. in technical		0.025	0.046+	0.012	0.029	0.033+	0.029	0.089***
Into technical			0.021	-0.013	0.004	0.008	0.004	0.064**
Imm. in service				-0.034	-0.017	-0.013	-0.017	0.043+
Into service					0.016	0.021	0.017	0.077***
Imm. in organizational						0.004	0.001	0.060*
Into organizational							-0.004	0.056**
Imm. in independent								0.060+
Into independent								

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

## Discussion

After having analyzed, in the previous chapter, how permanence within a specific occupational class moderates the association between class and preferences, this chapter has focused instead on the consequences of mobility. To date, we find only few attempts to assess the impact of intra-generational class mobility on political attitudes or behavior. The most developed theoretical and empirical considerations come from earlier studies that addressed inter-generational mobility. This strand of research first articulated the notion that mobile individuals will differ from their class of origin, but not completely assimilate into their class of destination. More recently, this expectation has been formulated as the gradient constraint hypothesis, and has been studied in relation to political participation in Finland (Lahtinen et al., 2017).

The analyses in this chapter have made clear that implementing a class scheme that accounts for both vertical and horizontal mobility increases substantially the complexity of studying class mobility. To tackle this complexity, in this chapter I studied vertical and horizontal mobility separately and I also established comparisons with different classes of reference by fitting interactive models. It was necessary to implement this strategy because the gradient constraint hypothesis is built around two groups to which we compare the class mobile: their class of origin and their class of destination.

The results in this chapter provide consistent support for the gradient constraint hypothesis. The random-effects estimations indicate that the preferences of the class mobile (vertically or horizontally) are close to those of their class of destination, but they are also more moderate. Hence, changes in class location appear to be paralleled by changes in economic preferences. While most of the differences between respondents having experienced different forms of (im)mobility are statistically significant, they are small in terms of size (although comparable to other socio-demographic factors related to these preferences such as gender or age). Overall, these results are in line with the gradient constraint hypothesis, and would imply that aggregate levels of class voting could be weakened by compositional effects due to mobility. If a substantial proportion of employees were mobile, class-based differences in preferences would be reduced.

Regarding the comparison between vertical and horizontal mobility, we might have expected the impact of vertical mobility on economic preferences to be greater, since preferences on economic issues should be more directly linked to the level of marketable skills required in an occupational class and the kind of economic prospects and risks they entail. However, the association between both forms of mobility and preferences turns out to be of comparable size. Regarding horizontal mobility, we found larger differences in the



comparison of individuals moving into the technical or inter-personal service work logic against those moving into the organizational or independent work logic. Because the organizational and independent work logics are characterized by preferences less favorable to state intervention and redistribution it is not surprising to find that respondents entering either of these work logics are more economically right-wing than the new entrants or immobile in the technical and inter-personal service work logic. Correspondingly, we find the opposite result for those entering the latter two work logics, which are characterized by relatively more economically left-wing preferences. As in previous chapters in this dissertation, this indicates that horizontal differentiation between occupational classes can be as important as vertical differentiation, and thus, accounts of class politics in post-industrial societies should implement measures of class location that reflect both dimensions.

After having compared different mobile and immobile respondents by means of random-effects models, in a next step, I fit fixed-effects models, which focus instead on within-individual variation. The advantage of the fixed-effects models is that they account for all unobserved time-invariant confounders, which means that differences in preferences cannot be grounded on unobserved (and constant) characteristics of respondents (like motivations) that explain both patterns of mobility and economic preferences. The limitation is that they establish a different kind of comparison than the random-effects models, since fixed-effects models do not respond to a general comparison between the mobile and immobile but rather to the average difference in preferences before and after having experienced mobility (for respondents who did experience mobility). The changes in preferences associated with mobility are much smaller in fixed-effects models in comparison to the random-effects models. Moreover, many of these differences are not statistically significant. The most consistent findings, which are replicated in both estimations, are that upward mobile respondents and individuals moving into the independent work logic become more opposed to state intervention. The differences in the results from the random- and fixed-effects models could indicate that some of the differences in preferences between mobile and immobile respondents are due to some unmeasured factor, such as attitudes or motivations that increase (or decrease) the likelihood of experiencing mobility and also affect attitudes towards state intervention in the economy and redistribution. For instance, it is possible that certain traits, like self-reliance and personal responsibility, increase the likelihood of both becoming self-employed and opposing state intervention. This kind of attitudes are accounted for in the fixed-effects models to the extent that they are stable over time. Part of the differences between the random- and the fixed-effects models (especially in terms of the statistical

significance of the results) are due to fixed-effects models being less efficient since they are solely estimated on within-individual variation while random-effects models rely on both within- and between-unit variation (Allison, 1994, 2009).

The different analyses presented tend to provide support for the gradient constraint hypothesis in the British case, especially if we take into account that random-effects models are a more adequate test of this hypothesis, and that fixed-effects models based on events coding (i.e. coding the event of experiencing vertical or horizontal mobility) are a strict test of the impact of mobility at the individual level. These findings are in line with Lahtinen et al.'s (2017) comparable study of political participation in Finland, and to earlier results focusing on inter-generational mobility. Although the gradient constraint hypothesis has been frequently studied in terms of cross-sectional comparisons in political preferences between groups that have experienced different forms of mobility, the differences between these groups imply a mechanism or effect of mobility at the individual level. The theoretical foundation of this average cross-sectional difference between the immobile and mobile is partly based on the idea that respondents change as a consequence of their experiences of mobility, and that their preferences and attitudes will be modified by entering a different class of destination. The analyses at hand provide further, albeit partial, support for this mechanism, since within-individual experiences of mobility are not as strongly related to changes in preferences. Since this within-individual expectation is not fully supported by the analyses at hand, we can only conclude that support for the gradient constraint hypothesis is partial. However, we must also acknowledge that the results are closer to the gradient constraint than to the extremism hypothesis.

The results from this chapter, together with those from chapter 5, provide support for socialization (or, at least, reinforcement) effects of class location. These analyses cannot separate or quantify selection and socialization effects because they consider changes in individuals' employment careers once they have entered a specific occupation. Thus, we cannot capture selection effects taking place earlier. We can, however, assess whether there are any socialization effects, that is, whether we find evidence of preferences changing as a response to holding a specific class location. Having found in the previous chapter that individuals with longer class tenure hold more distinct policy and party preferences and, in this chapter, that the class mobile differ in their preferences from the class immobile and that some within-individual changes in class location are associated with changes in preferences indicates that there are some socialization effects at work. This finding also has implications for aggregate class differences in preferences. Under greater occupational mobility class-based differences in preferences will be moderate. I reflect further on the

implications of these and previous results for class politics in post-industrial societies, and for future research on the topic, in the next chapter, which presents the conclusions from this dissertation.



## **Chapter 7**

### **Conclusion**

This dissertation has focused on class voting in post-industrial societies by analyzing empirically the relationship between social class, issue preferences and electoral behavior in European democracies. The main purpose of these analyses has been to assess the political behavior and preferences of low- and unskilled workers while, at the same time, contributing more generally to the understanding of the relationship between class location and political preferences at the individual level. Class was traditionally considered a crucial determinant of political behavior and attitudes (Lazarsfeld et al., 1968; Lipset, 1960; Lipset & Rokkan, 1967). However, in the 1980s and 1990s different scholars increasingly challenged the political (and social) relevance of class in light of social and economic transformations affecting the occupational structure (Clark & Lipset, 1991; Clark et al., 1993; Dalton et al., 1984; Rose & McAllister, 1986). These claims encouraged a response by different authors defending the role of social class in shaping political preferences (Goldthorpe & Marshall, 1992; Hout, Brooks, & Manza, 1993; van der Waal, Achterberg, & Houtman, 2007). This debate on the persistence or absence of class voting in post-industrializing societies implied that great efforts were placed on quantifying levels of class voting and on identifying cross-national and temporal trends in them.

Building on these different contributions, which focused on measuring trends in class voting and on demonstrating that class is still a relevant determinant of political behavior, in this dissertation I study the association between class and political preferences at the individual level by placing the focus on two different aspects: the political differentiation among low-skilled classes, and the potential moderators in the association between class and political preferences. Drawing on earlier studies within the post-industrial partisan realignment framework (Beramendi et al., 2015; Kitschelt & Rehm, 2014, 2015b, Kriesi et al., 2008, 2012; Oesch, 2013b), the starting point for the empirical analyses is the assessment, in chapter 2, of whether class location is associated with different preferences on economic and cultural issues. This chapter already presents evidence in line with recent research contradicting the postulates from the dealignment hypothesis (see e.g. G. Evans, 1999; van der Waal et al., 2007), which is further contested by the results from the following chapters. The different analyses corroborate that social class still matters for political preferences and behavior. Moreover, the second chapter already highlights an aspect that is made manifest throughout the dissertation: the complexity of studying class

voting in advanced capitalist societies due to the heterogeneity of the class structure and the multi-dimensionality of political conflict.

Although I focus on the comparison among workers, the results of the different chapters indicate that, generally, social class is still an important determinant of political preferences. Initial analyses of recent political events (like Brexit, or the electoral success of populist parties and candidates) have sparked a debate about the relevance of social class as a driver of these events (Carnes & Lupu, 2017; Hobolt, 2016). This dissertation indicates that further research on these topics should continue to address the role of social class. Even if the relevance of social class for voting could have decreased (Nieuwbeerta & De Graaf, 1999), it is still an important determinant of preferences and behavior. This is most clearly visible in class differentials in electoral abstention. Although the results presented here reveal strong similarities between certain classes (like production and service workers), they also expose larger differences among others, and indicate that Oesch's class scheme is an appropriate tool for approaching new patterns of class-party alignments in post-industrial societies. When studying issue preferences, electoral behavior, or class tenure and mobility, differences between classes appear not only along the vertical dimension of marketable skills level, but also along work logic (the horizontal dimension). Among the higher-grade classes, socio-cultural professionals appear as particularly distinct across all analyses, displaying on many occasions attitudes and behavior closer to workers than to other middle classes. When it comes to the lower-grade classes, we find that office clerks tend to diverge more from production and service workers, and are more similar to higher-grade classes (even after controlling for educational attainment). The importance of the horizontal dimension is also revealed in the analyses of class mobility, where horizontal moves are related to differences in economic preferences comparable in size to those grounded in vertical mobility. Thus, future research should account for both vertical and horizontal class differentiation.

This dissertation has indicated that certain social structural transformations could undermine the political relevance of social class. For example, higher rates of class mobility or higher prevalence of interrupted and short-tenured employment careers could decrease the class basis of political preferences. However, in contrast to the dealignment perspective, I find that the political relevance of social class does not only depend on social transformations but that there is also a crucial role for the political context. The politicization of issues by parties, the dimensionality of political conflict, or the weight social classes place on different policy issues have implications for the strength of the association between class and political preferences. These findings are in line with the realignment

thesis as well as with the contributions that have emphasized the relevance of the partisan supply (G. Evans & De Graaf, 2013b).

Other than confirming the continuing relevance of social class in politics and the appropriateness of implementing Oesch's class scheme in this context, there are two other important contributions to the literature on class voting stemming from these analyses. The first one concerns the similarities found between production and service workers (and their differentiation from office clerks and other occupational classes). The systematic comparisons established between workers in the production and inter-personal service work logic reveal strong resemblance between these two groups. Their similarity is consequential not only for future research on class voting, but also, more generally, for class politics, for parties' strategies and for potential inequalities in political representation. The similarity between production and service workers becomes especially relevant if, as mentioned above, social class has a particularly central role in explaining recent political developments. The second contribution is to improve our understanding of class voting by elaborating on the mechanisms and moderators intervening in the relationship between social class, preferences and electoral behavior at the individual level. The insights gained about the relationship between these variables provide grounds for future research that extends the analyses here conducted.

Notwithstanding the higher complexity in the configuration of class-party alignments in post-industrial societies, the analyses return a simple and clear message, that workers in the production and inter-personal service work logic represent a homogeneous electoral constituency, displaying similar political preferences as well as behavior. Already in chapter 2, we find production and service workers to hold similar issue preferences, even when performing unconditional comparisons between the two classes. This is especially striking when considering the substantial differences in the demographic composition of these two classes as well as in their exposure to atypical employment. Production and service workers appear particularly similar in their left-wing economic preferences (favorable towards redistribution), while differences are marginally larger on cultural issues, where service workers appear as slightly more culturally libertarian. Even more remarkable is the stability of this similarity across different configurations of the partisan supply, as shown by the analyses conducted in chapter 3.

As we observed in the third chapter, production and service workers remain a viable electoral coalition (in terms of their similarity of preferences) across contexts in which the partisan supply politicizes different issues. Other social classes may occupy a comparable position on a specific issue (for instance, socio-cultural professionals are close to workers

even under high politicization of the economic issue of redistribution), but their coalition becomes highly unlikely depending on the politicization of other issues. For example, socio-cultural professionals and workers constitute an improbable coalition under great salience of the immigration issue. While some economic coalitions can be put under tension by the politicization of cultural issues (and vice-versa), this is less likely to occur for production and service workers. Although it is true that there might be some increasing tension between these two classes when politicization is greatest, this is generally the case for all social classes because class heterogeneity is overall higher under greater politicization. And, even in this context, production and service workers are placed relatively closer to each other than to other classes.

This similarity between workers is also apparent in their electoral behavior, as shown in chapter 4. These analyses reveal some heterogeneity in these classes' average support for certain party families, which appear to be related to the slightly greater differences found on cultural preferences in the previous chapters. For instance, service workers are more likely to support green parties or less likely to vote for the radical right than production workers. In any case, these are rather small differences when compared to the rest of the class structure. Taking into consideration the full electoral choice-set available to workers, the analyses in this chapter portray a clear working-class profile of electoral abstention. On this outcome, workers appear markedly more likely to have abstained from voting in the last national election, twice more so than some of the middle classes. This makes manifest class inequalities in electoral participation that could be translated into an unequal representation of the preferences of workers. This is particularly problematic if we take into account that no other classes (that have a greater propensity to participate) display the particular combination of cultural and economic preferences held by workers.

The second part of chapter 4 assesses to what extent party choices are informed by the distance between parties and voters on different issues. I take this as a measure of a programmatic linkage between voters and parties. Furthermore, I explore whether classes differ in the extent to which they are programmatic in their party choice. In these analyses, service and production workers appear to be less programmatic than other classes, since for three of the four items considered (ideology, attitudes towards immigration and towards homosexuality), distance to parties has a lower weight in explaining these classes' electoral choice. However, these results also indicate that distance on the economic issue of redistribution is more closely related to workers' party choice than to other classes'. This result appears to run against earlier findings indicating that production workers have



become increasingly likely to base their electoral choices on cultural issues (e.g. Houtman et al., 2008; Oesch, 2008a). However, this earlier research has primarily focused on workers' support for the radical right. The analyses in chapter 4, instead, account for workers' support for any party, not just radical right alternatives. Hence, while right-wing voting among workers may be based on their authoritarian attitudes, this does not preclude that overall, in their evaluation of different party alternatives and the likelihood of supporting each of them (like the mainstream right), economic considerations play a greater role in workers' vote choices. The variation in the weight placed on different issues by classes raises again the potential problem of inequalities of representation. Workers are less likely to participate in elections and they not only hold distinct preferences, but they also place greater weight on the economic issues, which other classes deem as less relevant in determining their vote. This could imply a lower responsiveness to workers' economic demands from parties. As I argue in the conclusion to chapter 4, although the overall association between issue distances and party choice points to a programmatic linkage between voters and parties, this is only estimated on respondents who have not abstained. Hence, we should also take into account that this programmatic link is not established for individuals who do not vote.

While these chapters yield consistent results about the similarities between production and service workers based on cross-sectional and cross-national analyses, the last two chapters adopt instead a longitudinal perspective and attempt to capture, at the individual level, the impact on political preferences of entering and staying in a specific class. These chapters, hence, pay closer attention to individual-level class dynamics, and how they are associated with political attitudes and behavior. I find some small differences between production and service workers in these analyses, although they are still comparatively more similar to each other than to other classes. When assessing the moderating impact of tenure on the strength of the association between class and preferences, the effects of class tenure are similar for both groups of workers for their economic and cultural preferences. Longer tenure reinforces the support for redistributive policies and state intervention in the economy for production and service workers, whereas there is no apparent association between stability within a class location and cultural preferences. For party preferences is where we find some variation in the impact of tenure for workers in the technical or the inter-personal service work logic. Production workers appear as increasingly likely to support the Labour party (against supporting the Conservatives or the Liberal Democrats) as tenure increases, but this is not replicated for service workers. This suggests that political differences between workers are largest among long-term incumbents in these classes. At the same time, we also find, for both classes, a

'mobilization' effect of tenure that increases the support for the Labour party (against not having a specific party preference). Although these analyses are based on partisanship and not actual vote, this could indicate that longer tenure might partially compensate for workers' higher likelihood of abstaining.

When analyzing class mobility, the approach is slightly different and does not focus so closely on the comparison between production and service workers, partly because mobility is operationalized by separating vertical from horizontal class moves (i.e. not between specific classes). However, the models estimated with interactive terms between mobility and class of destination and origin do allow for a better comparison of workers in different logics. In these models, as with tenure, we find some slight differences between production and service workers in the strength of the association between mobility and preferences (but not in its direction). Immobile workers in the technical logic appear more strongly left-wing in their economic preferences than upward mobile individuals who abandoned this class, or the downward mobile who enter this class. Immobile service workers are also more favorable to redistribution and state intervention, but the difference with respect to respondents moving in and out of this class is smaller. A similar pattern appears for horizontal mobility into and away from the production and service workers' classes. Differences between mobile and immobile respondents are larger for production workers. These results are probably driven by immobile production workers being the class most favorable towards state intervention and redistribution. As a consequence, all comparisons of the mobile with this group will yield larger differences than with immobile service workers, whose preferences are not as extreme.

Results from the various cross-sectional and longitudinal analyses indicate that, in spite of the differences in work logic, production and service workers hold similar political preferences. Although the inter-personal service work logic grounds differences in political attitudes and behavior among the higher-grade classes, this is not paralleled for workers. Workers' similarity should be consequential for class politics, since there is a potential to mobilize these two classes together, as part of a single electoral coalition characterized by economically pro-redistributive and culturally authoritarian preferences. To some extent, this already occurs, since production and service workers display similar patterns of electoral behavior. However, we also find these workers to be considerably less likely to vote in elections than other classes. This indicates that there is further potential to mobilize these voters and, also, that their demands are probably not sufficiently addressed by parties. Although there certainly is a potential for the further joint electoral mobilization of these classes, there are certain factors that could impair it. First, a study of the demographic

correlates of these classes shows substantial differences between the two (which were already captured in earlier research) (Oesch, 2006b). Secondly, although we find great similarity in economic preferences, cultural preferences are somewhat more diverse, and the variance of these preferences is also larger. The two classes appear to be most unified and homogeneous in their economic preferences (and these are the most salient preferences explaining their electoral choice). However, the slightly larger variation in cultural preferences and, especially, the demographic heterogeneity might increase the difficulty for parties to reach these workers together, and cater to their demands. This dissertation has not explored the issue of class consciousness or of self-identification with a specific class. In light of these results, it would be interesting for further research to consider whether production and service workers perceive themselves as part of the same class. This should be done, not only by generally asking whether they identify with the working class, but also by explicitly assessing whether they perceive each other as part of the same class. This should have implications for their electoral mobilization by parties, and for the possibility to conform a single coalition of disadvantaged workers that revitalizes 'old' patterns of class politics.

Owing to the implementation of a measure of social class that is adapted to post-industrial contexts, it has been possible to reveal these differences and similarities between occupational classes. Operationalizing social class by means of Oesch's scheme throughout the analyses conducted in this dissertation has underlined the importance of accounting for the increasing heterogeneity in the occupational structure. Although the political dissimilarities between production and service workers are minor, horizontal class differences do capture political divisions between other classes. Oesch's class scheme is a good account of political divisions among the higher-grade classes, especially of the particular deviation of socio-cultural professionals from the other professional classes (although we also find differences between technical professionals and managers). For the lower-grade classes the largest differences are found for office clerks, who deviate from workers and show more similar preferences and behavior to those of the higher-grade classes. Overall, the size of the horizontal differences among the higher-grade classes are generally similar to those among the lower-grade classes.

The second major contribution of this dissertation to the literature on class voting is to address, in the different chapters, a set of moderators and mechanisms that provide further insights about the individual-level link between class and political behavior in post-industrial societies. Chapter 3 accounts for a moderating effect of a characteristic of the partisan supply: the extent to which parties politicize different issues. Complementing

recent research that has shown the relevance of parties' positions to explain the strength and variation in class voting (G. Evans & De Graaf, 2013b), in this chapter I focus on the importance of the partisan supply for the association between class and specific issue preferences. These analyses confirm a moderating role of parties' politicization of issues in the articulation of class-distinct preferences. Hence, the influence of the partisan supply on class voting occurs at two stages: first, it affects the extent to which class location will be associated with preferences (as shown in chapter 3) and, second, it moderates the extent to which class differences in preferences will be translated into distinct voting behavior (Elff, 2007, 2009; G. Evans & De Graaf, 2013b; G. Evans & Tilley, 2012a, 2012b, 2017; Rennwald & Evans, 2014). Thus, if parties do not represent distinct policy profiles or do not attribute salience to issues on which classes are divided, class voting should decline steeply.

Adopting a longitudinal approach, chapters 5 and 6 study how change and stability in class location throughout individuals' employment careers affects political preferences. These chapters provide further insights about the relationship between class and preferences at the individual level by adding a temporal perspective, contributing especially to the debate on whether social class operates through selection or socialization mechanisms. Although the analyses of these two chapters do not provide a direct and definitive test of these two effects, especially not of selection mechanisms, the results evidence the presence of socialization effects. This evidence comes, first, from the moderating impact of class tenure. The longer an individual has been in a specific class location, the more her preferences differ from individuals in other classes. This suggests that stability in class location contributes to the process of class formation, and the development of class-specific attitudes and behavior. Longer class tenure means that respondents have experienced for a longer time the employment and labor-market risks associated with a specific class location, and also that they have consistently been exposed to certain kinds of networks and interactions, and have developed the skills and implemented the tasks that characterize their social class. Interestingly, in these analyses, the moderating effect of class tenure is strongest for managers and production workers. These two classes represent the typical industrial class opposition, since they are located at opposing ends of hierarchies with clear command and authority lines. This could indicate that socialization is stronger in these kind of classes, where the lines of command and one's relative position in the occupational structure are clearer. However, some of the results pertaining to the party preferences of managers run counter to our expectations. Hence, as I discuss below, it would be interesting to replicate these analyses in other contexts.

The results of the analyses of intra-generational mobility are also in line with the socialization hypothesis. Individuals who have experienced either vertical or horizontal mobility display different preferences than immobile respondents in their class of origin. Mobile respondents' preferences are closer to those that characterize their class of destination. This definitely points to some socialization in the class of destination. Nonetheless, in line with the gradient constraint hypothesis, this socialization is not complete, since mobile respondents partially maintain the preferences of their class of origin. This is manifested in mobile respondents holding more moderate preferences than immobile individuals. The association between mobility and economic preferences is stronger in the analyses estimated as random-effects models. As I mentioned in chapter 6, random- and fixed-effects models are not perfectly comparable because they differ in the sample on which they are estimated and in the interpretation of the effects. Moreover, these fixed-effects models are a strict test of the impact of mobility, since the models are estimated on variables that already capture change. Nevertheless, the differences between the random- and fixed-effects models could indicate some selection into mobility based on individual-level unobserved factors (like motivation, self-reliance or abilities) that shape both the likelihood of experiencing mobility and political preferences.

Although the contributions from chapters 3, 5 and 6 concern moderation effects and mechanisms tested at the individual-level, they provide insights about how social and political changes may affect aggregate levels of class voting. The results from chapter 3 highlight particularly the crucial role of parties in shaping public opinion. As discussed above, because parties influence the association between class and vote at two stages, first in the relationship with preferences, and next in the association between preferences and vote, their role is particularly important for overall levels of class voting. If parties do not hold distinct positions or do not attribute salience to policy issues on which social classes are divided, aggregate levels of class voting should decrease. This pattern is also reflected in the low class-distinctiveness of the social democratic electorate. Because in some countries these parties have attempted to cater to the middle classes (G. Evans & Tilley, 2017; Gingrich & Häusermann, 2015; Rennwald & Evans, 2014), the working-class profile of this party family has become diluted. The aggregate level implications of individual-level relationships appear especially relevant in the context of class non-voting. As chapter 4 indicates, workers are substantially less likely to participate in elections than other classes. This raises the issue of whether this electorate's demands will be represented by political parties. If political parties neglect this constituency, working-class issues will probably be less politicized, and this will further decrease the distinctiveness of these classes' preferences. Under these circumstances, we can hypothesize that responsiveness to these

workers' demands will be lower, which brings to the fore potential inequalities in political representation.

The analyses in the last two empirical chapters, which address employment careers from a longitudinal perspective, also have relevant aggregate-level implications. The prevalence of class voting will be lower under greater intra-generational social mobility and instability of employment careers. As chapters 5 and 6 indicate, differences in political preferences and behavior are smaller among respondents who have held a specific class location for a short time, and mobile respondents hold more moderate economic preferences. The joint consideration of these findings suggests that if there is greater intra-generational mobility, dissimilarities between respondents in different classes will be diluted. This would occur not only if people change class locations more frequently, but also if they move in and out of employment (because of spells of unemployment or out of the labor market). This is a relevant finding, since post-industrial societies are likely to be characterized by greater class mobility and shorter job tenure.

### **Limitations and suggestions for further research**

As the extensive literature on the topic indicates, one dissertation cannot wholly cover the study of class voting in post-industrial societies. Even after placing the focus on the comparison between production and service workers, there are a number of questions about the link between class and behavior that could not be addressed in this work, and some limitations of the analyses here presented that should receive further consideration in future research. Moreover, this dissertation also has introduced some innovations and nuances in the kind of analyses performed that could be exploited in future studies. Both the limitations and the contributions of these analyses represent potential avenues for future research.

Overall, this dissertation lends support for the post-industrial partisan realignment theory and also (more indirectly) to accounts emphasizing the role of the supply side for the strength of class voting. Hence, further research should continue along the lines of these two frameworks. Moreover, implementing a two-stage analysis of the association between class and electoral behavior has proven useful in understanding class voting and the differences between production and service workers.

Following this two-stage approach, chapters 2 and 3 start by studying the association between class and issue preferences. One of the limitations of these analyses is that they include only one item capturing preferences over economic policies. We find considerable similarity between production and service workers in economic preferences

but this is only based on the issue capturing attitudes towards redistribution. Chapters 5 and 6, although based on a different data source and operationalizing these preferences with several items, also consider only one dimension of economic conflict (referring to state intervention in the economy and redistribution). Since recent literature has indicated that in post-industrial societies economic preferences are increasingly complex and multidimensional, it would be interesting to extend these analyses using additional data that includes a more varied set of items capturing economic and social policy issues (Armingeon & Bonoli, 2007; Hemerijck, 2002; Otjes, 2016; van der Waal, Achterberg, Houtman, de Koster, & Manevska, 2010). In this regard, it should be especially interesting to assess workers' preferences on welfare chauvinistic and welfare populist issues. Different studies have indicated that these issues are associated with both economic and cultural attitudes (de Koster et al., 2012; Derks, 2004; van der Waal et al., 2010; van Oorschot, 2006). As evidenced in chapter 2, differences between production and service workers are marginally larger on the cultural dimension, hence there could be larger differences between workers on these issues.

Chapter 2 focuses on overall differences in preferences between production and service workers in a dataset that pools together observations across different countries and waves of the ESS. Although the similarity between production and service workers appears rather consistently across different clusters of countries (grouped according to patterns of employment growth), future research could consider in greater detail potential cross-country variation in the differences between production and service workers. These analyses could also assess whether variation in the composition of the production and service workers class—in terms of age, gender, or number of workers from immigrant origin—has an impact on the political similarities found between these two classes.

Part of the justification for the analyses conducted in chapters 5 and 6 is that they address one of the main limitations of chapter 2, namely that it is based on cross-sectional data. Cross-sectional analyses of class and preferences (or behavior) implicitly assume that the impact of class is similar for all respondents (independent of how long they have been in a class), and they also neglect dynamics of class mobility and the impact of entering a specific class location. Following the analyses conducted in chapter 2, further research could extend this longitudinal perspective to the analyses of chapter 3. Ideally, one would assess, with longitudinal data from different countries, how temporal variation in the politicization of issues alters the impact of class mobility (as well as stability) on political preferences. Considering the results from chapters 3 and 6, we would expect the impact of mobility on preferences to be weaker under lower politicization of issues. Estimating these models

would be rather complex and especially demanding in terms of data, since they would require many time points (waves) on which preferences and parties' positions are measured to have enough observations of politicization at the aggregate level.

One of the limitations of chapter 3 is that, because it is based on observational data, it is not possible to address the problematic of whether political parties lead or follow public opinion. I address this limitation by taking lagged measures of the partisan supply. However, the causal influence of the partisan supply on the strength of the association between class and policy preferences could be tested by means of survey experiments. Class voting is not frequently the subject of experimental studies, mostly because class is not a trait that can easily be manipulated. However, it is possible to manipulate the degree of partisan polarization to which individuals are subject and the extent to which parties politicize class-related issues. Following the lead from studies in political psychology, one possibility would be to design treatment conditions that present individuals with policy issues that vary in the degree to which they are framed from a class perspective. By manipulating the salience and the framing of policy messages (by different parties) so that some appeal more directly to class-based interests, and then measuring respondents' policy preferences, we could move closer to identifying the causal moderating effect of the supply side in a controlled experimental setting. Such a research design, together with the analyses based on observational data presented in chapter 3 (which could also be extended with longitudinal data), would provide a strict test of the causal moderating effect of the partisan supply.

Chapter 4 analyzes the relationship between class and voting, and the extent to which electoral choice is based on distances between parties and voters on issues. The analyses in the second part of this chapter suggest different lines of research to be pursued further. As with chapters 2 and 3, one of the logical extensions is to include a larger number of items to measure party-voter distances on different issues, especially in the case of the economic dimension. Another interesting possibility would be to analyze further factors that could moderate the association between issue distances and voting, or the heterogeneity in the weight that classes place on different issues. This could be done by introducing moderating factors at the country and the party level. To pursue this line of research, it would be necessary to perform similar analyses as the ones presented in the chapter on a wider range of countries (or country-year combinations) and to implement a two-stage multi-level analysis, as done, for instance, by de Vries et al. (2011). This would allow us to observe whether the weight placed by social classes on the distance on different issues when deciding which party to support depends on the configuration of the supply



side (e.g. in terms of the polarization of parties, or the party families contesting the election). A similar two-stage approach could be implemented to compare the relevance of different issues in predicting the support for specific party families. The difficulty of estimating these two-stage models analyzing temporal, cross-country and cross-party variation lies in the requirements they pose in terms of data. On the one hand, we need sufficient observations of the units in the higher hierarchical level if we want to focus on cross-country variation. On the other, we also need sufficient support for smaller party families in the sample to estimate heterogeneous effects across parties.

Reflecting on the longitudinal analyses of chapters 5 and 6, one clear limitation is that they are based on a single case. The implementation of these kind of longitudinal analyses is frequently restricted by data availability, especially due to the scarcity of political variables in panel surveys. As I indicated in chapter 5, there are some specificities of the British case that limit the generalizability of these results to other contexts. However, since the focus is on mechanisms at the individual level, these results should be extensible to other advanced economies. Among the different analyses conducted for the British case, the results referring to the moderating role of tenure for partisanship are more likely to be specific to this case and, thus, to show greater variation across countries. As I mentioned in chapter 5, we find some unexpected results for the managerial class, which could be partially grounded on the particular configuration of the British partisan supply. It would, hence, be interesting to contrast these unexpected results with analyses based on other countries. Although the German Socioeconomic Panel does not include the variables needed to perform similar analyses, these could be implemented with the Swiss Household Panel. Another limitation of the longitudinal analyses is that, even if fixed-effects models allow us to rule out any confounding effects from individual time-invariant characteristics (both observed and unobserved), we cannot exclude some anticipation or selection effects intervening in the relationship between class mobility and vote. For instance, we cannot rule out that individuals change their preferences in anticipation of entering a specific class.

Another potentially fruitful extension of these analyses could consider other patterns of class mobility. Chapter 6 models the impact of moving between different classes. It would be interesting to also assess the consequences of leaving a class to a non-employment status or of entering a class from a non-employment status, and compare them to the results found for mobility between classes. Because many different trajectories in employment careers are possible, there is great potential to study different forms of mobility. It would also be possible to allow for asymmetric effects of class mobility, depending on the kind of class changes under consideration. Although potentially

interesting, these analyses will be limited by their complexity, which increases the difficulty of summarizing and interpreting results, and by data constraints, since the more we specify patterns of class mobility and transition into non-employment status, the fewer the observations on which the impact of these changes will be estimated. These analyses could also be extended to analyze return mobility, that is to assess how those who left a given class and then return to it compare to stable occupants of that class.

All these avenues for future research are proposed from the perspective of individual-level analyses because this has been the focus in this dissertation. Clearly, some of the results of this dissertation have implications for overall levels of class voting and for class differences in preferences, which could be studied at aggregate levels of analyses (such as those mentioned above on the aggregate effects of mobility or politicization). Undeniably, there are many potential avenues for future research, especially considering the individual-level association between class, preferences and voting, and how this relationship is mediated by different factors and affected by changes in employment careers. While some of these potential lines of research are more directly related to the results and arguments presented in this dissertation (and to their limitations) others are more generally related to the topic of class voting. Hopefully, this dissertation will inform the understanding of class politics in future analyses, especially when it comes to the preferences and behavior of workers, since this group of the electorate appears to have attracted increasing attention in light of recent political events. As made manifest throughout this dissertation, class politics has become increasingly complex in post-industrial societies due to the heterogeneity of the class structure, patterns of mobility within it, the high dimensionality of political conflict, and the relevance of the political supply. This complexity provides a challenge for future studies, but also introduces incredibly interesting potential to keep studying this topic.

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# Appendices

**Appendix 1.A: Correspondence between ISCO-88 codes and Oesch's occupational classes.**

Self-employed		Employees			Marketable skills
Independent work logic	Technical work logic	Organizational work logic	Interpersonal service work logic		
<b>Large employers (&gt;9)</b> Self-employed with more than 10 employees	<b>Technical experts</b> ISCO codes 2100-2213	<b>Higher-grade managers and administrators</b> ISCO codes 1000-1251, 2410-2419, 2441, 2470	<b>Sociocultural Professionals</b> 2220-2323, 2350-2351, 2359, 2420-2440, 2442-2443, 2445, 2451, 2460	Professional/ Managerial	
<b>Petite bourgeoisie with employees (&lt;9)</b> Self-employed, less than 10 employees, and not ISCO codes 2000-2470	<b>Technicians</b> ISCO codes 3100-3213, 3471	<b>Associate managers and administrators</b> ISCO codes 1252-1319, 3410-3449, 3452	<b>Sociocultural semi-professionals</b> 2330-2340, 2352, 2444, 2446-2450, 2452-2455, 3220, 3222-3224, 3226, 3229-3232, 3240-3400, 3450-3451, 3460-3470, 3472-3480	Associate professional/ managerial	
<b>Petite bourgeoisie without employees</b> Self-employed with no employees and not ISCO codes 2000-2470	<b>Skilled crafts</b> ISCO codes 110, 7120-7142, 7200-7233, 7240-7423, 7430-7520, 8311, 8324, 8333	<b>Skilled office</b> ISCO codes 4000-4112, 4114-4141, 4143, 4190-4210, 4213-4221	<b>Skilled service</b> 3221, 3225, 3227-3228, 5122, 5141, 5143, 5110-5113, 5150-5163, 5200-5210, 8323	Generally/ Vocationally	
	<b>Routine operatives</b> ISCO codes 7100-7113, 7129-7130, 7143, 7234, 7424, 8000-8310, 8312, 8334-8400, 9160-9162, 9300-9333	<b>Routine office</b> ISCO codes 4113, 4142, 4144, 4211-4212, 4222-4223	<b>Routine service</b> 5120-5121, 5123-5130, 5131-5140, 5142, 5149, 5169, 5220-5230, 8320-8322, 9100-9153	Low/ Unskilled	

Source: Oesch (2006b)

## Appendix 2.A: Question wording and descriptive statistics

Variable	Wording	Valid N	Mean	SD	Min	Max
<b>Dependent variables</b>						
Ideology	In politics people sometimes talk of “left” and “right”. Using this card, where would you place yourself on this scale, where 0 means the left and 10 means the right?	220,238	5.115	2.184	0	10
Attitudes towards immigration	Factor scores predicted from the factor analyses of six survey items presented in the next appendix	223,698	0.029	0.985	-2.353	2.299
Income redistribution	To what extent you agree or disagree with the statement: The government should take measures to reduce differences in income levels. (Higher values indicate disagreement)	249,112	0.035	1.003	-1.061	2.824
Tolerance towards gays and lesbians	To what extent you agree or disagree with the statement: Gay men and lesbians should be free to live their own life as they wish. (Higher values indicate agreement)	243,844	0.071	0.956	-2.173	1.085
Support for European integration	Some say European unification should go further. Others say it has already gone too far. Using this card, what number on the scale best describes your position? (Higher values indicate it should go further)	156,856	0.013	0.988	-1.964	1.781

### Independent variables

Occupational class	Categorical variable measuring occupational classes based on Oesch's class scheme					
	- Self-employed professionals and large employers	4,814	0.022			
	- Small business owners	24,841	0.111			
	- (Associate) managers and administrators	30,244	0.135			
	- Office clerks	23,401	0.105			
	- Technical professionals and technicians	13,641	0.061			
	- Production workers	54,632	0.244			
	- Socio-cultural (semi-)professionals	25,053	0.112			
	- Service workers	47,172	0.211			

(Continues on the next page)

<p>Labor market status</p> <p>Categorical variable recoded from: type of contract of the respondent and main activity at the time of the survey:</p> <ul style="list-style-type: none"> <li>- Insiders (workers with a permanent contract)</li> <li>- Outsiders (workers with a temporary or no contract)</li> <li>- Outside the labor market</li> <li>- Unemployed</li> </ul>	<p>113,479</p> <p>20,268</p> <p>107,230</p> <p>13,280</p>	<p>0.446</p> <p>0.080</p> <p>0.422</p> <p>0.052</p>	<p>18</p>	<p>123</p>
<p>Age</p> <p>Age in years (The sample has been limited to respondents who are at least 18 years old). In the regression models age is recoded so that 0 indicates the minimum age considered (i.e. 18 years)</p>	<p>253,034</p>	<p>48.025</p>	<p>18.575</p>	<p>1</p>
<p>Gender</p> <p>Gender of the respondent. Coded 1 for male</p>	<p>253,970</p>	<p>46.27</p>	<p>0.499</p>	<p>1</p>
<p>Union membership</p> <p>"Are you or have you ever been member of a trade union or similar organization? If Yes, is that currently or previously?". Coded 1 for those who are member currently and 0 for all other responses</p>	<p>252,488</p>	<p>0.190</p>	<p>0.392</p>	<p>1</p>
<p>Education (Categorical):</p> <p>"What is the highest level of education you have successfully completed?"</p> <p>Categories adapted to each country in which the survey was conducted and later recoded into the ESS Education Detailed ISCED Coding Frame.</p> <ul style="list-style-type: none"> <li>- Less than lower secondary</li> <li>- Lower secondary education completed</li> <li>- Upper secondary education completed</li> <li>- Post-secondary non-tertiary education</li> <li>- Tertiary education completed</li> </ul> <p>Countries and waves included in the sample: AT (1-3), BE (1-6), BG (3-6), CH (1-6), CY (3-6), CZ (1-2, 4-6), DE (1-6), DK (1-6), EE (2-6), ES (1-6), FI (1-6), FR (1-6), GB (1-6), GR (1-2, 4-5), HR (4-5), HU (1-6), IE (1-6), IS (2, 6), IT (1-2, 6), LT (5-6), LU (1-2), LV (3-4), NL (1-6), NO (1-6), PL (1-6), PT (1-6), RO (3-4), SE (1-6), SI (1-6), SK (2-6)</p>	<p>35,612</p> <p>49,646</p> <p>99,805</p> <p>8,107</p> <p>59,685</p>	<p>0.141</p> <p>0.200</p> <p>0.395</p> <p>0.032</p> <p>0.236</p>		
<p>Country-wave Fixed-Effects</p>				
<p>Country clusters</p> <p>Nordic countries (DK, FI, IS, NO, SE)</p> <p>Continental European countries (AT, BE, CH, DE, FR, LU, NL)</p> <p>Anglo-Saxon and Southern European countries (CY, ES, GB, GR, IE, IT, PT)</p> <p>Eastern Europe (BG, CZ, EE, HR, HU, LT, LV, PL, RO, SK)</p>	<p>42,855</p> <p>75,444</p> <p>65,143</p> <p>70,815</p>	<p>0.168</p> <p>0.297</p> <p>0.256</p> <p>0.278</p>		



## Appendix 2.B: Results from factor analysis of immigration items in the European Social Survey

Survey items	Factor 1
[Country] should allow people of the same race or ethnic group as most [country's] people to come and live here	0.7516
[Country] should allow people of a different race or ethnic group as most [country's] people to come and live here	0.8495
[Country] should allow people from the poorer countries outside Europe to come and live here	0.8180
It is generally bad or good for [country]'s economy that people come to live here from other countries	-0.7758
[Country]'s cultural life is generally undermined or enriched by people coming to live here from other countries	-0.7775
[Country] is made a worse or a better place to live by people coming to live here from other countries	-0.7934

Note: Entries are the result of a principal-component factor analysis. 1 component extracted, eigenvalue 3.7916. Number of observations included in the analysis 248,707.

**Appendix 2.C: Association between socio-demographic factors and occupational class by grouped countries**

**Table 1: Distribution of labor market status (including atypical employment and unemployment) across occupational class**

Occupational class	Insider	Outsider	Outside the labor market	Unemployed	Total
<b>NORDIC COUNTRIES</b>					
Large employers	73.12 (661)	2.65 (24)	23.67 (214)	0.55 (5)	100.00 (904)
Small business owners	60.70 (2,346)	4.86 (188)	33.17 (1,282)	1.27 (49)	100.00 (3,865)
Technical professionals	69.32 (2,237)	6.17 (199)	22.03 (711)	2.48 (80)	100.00 (3,227)
Production workers	47.59 (3,772)	8.28 (656)	38.72 (3,069)	5.41 (429)	100.00 (7,926)
Managers	70.27 (4,134)	5.29 (311)	22.66 (1,333)	1.78 (105)	100.00 (5,883)
Clerks	48.64 (1,651)	6.98 (237)	40.42 (1,372)	3.95 (134)	100.00 (3,394)
Socio-cultural professionals	63.64 (3,580)	11.38 (640)	23.47 (1,320)	1.51 (85)	100.00 (5,625)
Service workers	45.93 (4,480)	11.09 (1,082)	38.54 (3,760)	4.44 (433)	100.00 (9,755)
Total	56.34 (22,861)	8.22 (3,337)	32.19 (13,061)	3.25 (1,320)	100.00 (40,579)
<b>CONTINENTAL EUROPEAN COUNTRIES</b>					
Large employers	75.99 (1,326)	0.46 (8)	22.23 (388)	1.32 (23)	100.00 (1,745)
Small business owners	62.23 (4,134)	3.60 (239)	32.27 (2,144)	1.90 (126)	100.00 (6,643)
Technical professionals	62.46 (3,101)	5.98 (297)	28.64 (1,422)	2.92 (145)	100.00 (4,965)
Production workers	43.85 (5,802)	7.35 (973)	42.06 (5,566)	6.73 (891)	100.00 (13,232)
Managers	60.26 (6,500)	5.14 (554)	31.91 (3,442)	2.70 (291)	100.00 (10,787)
Clerks	50.07 (4,322)	6.22 (537)	39.98 (3,451)	3.73 (322)	100.00 (8,632)
Socio-cultural professionals	58.94 (5,187)	9.08 (799)	29.86 (2,628)	2.12 (187)	100.00 (8,801)
Service workers	43.24 (5,313)	9.73 (1,196)	41.34 (5,080)	5.68 (698)	100.00 (12,287)
Total	53.19 (35,685)	6.86 (4,603)	35.95 (24,121)	4.00 (2,683)	100.00 (67,092)

*(Continues on the next page)*

Occupational class	Insider	Outsider	Outside the labor market	Unemployed	Total
<b>SOUTHERN EUROPEAN AND ANGLO-SAXON COUNTRIES</b>					
Large employers	76.12 (1,017)	1.65 (22)	19.39 (259)	2.84 (38)	100.00 (1,336)
Small business owners	58.50 (5,438)	4.04 (376)	34.85 (3,240)	2.60 (242)	100.00 (9,296)
Technical professionals	57.12 (1,227)	12.99 (279)	25.33 (544)	4.56 (98)	100.00 (2,148)
Production workers	30.00 (3,697)	10.95 (1,349)	48.37 (5,962)	10.69 (1,317)	100.00 (12,325)
Managers	53.08 (2,943)	13.17 (730)	29.73 (1,648)	4.02 (223)	100.00 (5,544)
Clerks	44.09 (2,830)	13.26 (851)	36.57 (2,347)	6.08 (390)	100.00 (6,418)
Socio-cultural professionals	52.17 (2,527)	16.02 (776)	28.76 (1,393)	3.06 (148)	100.00 (4,844)
Service workers	34.23 (4,471)	17.21 (2,247)	39.61 (5,173)	8.95 (1,169)	100.00 (13,060)
Total	43.93 (24,150)	12.06 (6,630)	37.41 (20,566)	6.59 (3,625)	100.00 (54,971)
<b>EASTERN EUROPEAN COUNTRIES</b>					
Large employers	86.37 (716)	1.57 (13)	10.49 (87)	1.57 (13)	100.00 (829)
Small business owners	70.00 (3,526)	5.24 (264)	21.66 (1,091)	3.10 (156)	100.00 (5,037)
Technical professionals	53.86 (1,778)	6.33 (209)	35.96 (1,187)	3.85 (127)	100.00 (3,301)
Production workers	34.20 (7,232)	9.05 (1,915)	47.47 (10,039)	9.28 (1,963)	100.00 (21,149)
Managers	56.03 (4,499)	6.75 (542)	34.46 (2,767)	2.76 (222)	100.00 (8,030)
Clerks	46.10 (2,285)	7.75 (384)	41.52 (2,058)	4.64 (230)	100.00 (4,957)
Socio-cultural professionals	56.60 (3,273)	9.18 (531)	32.51 (1,880)	1.71 (99)	100.00 (5,783)
Service workers	41.39 (4,996)	10.56 (1,274)	40.61 (4,902)	7.44 (898)	100.00 (12,070)
Total	46.28 (28,305)	8.39 (5,132)	39.26 (24,011)	6.06 (3,708)	100.00 (61,156)

Note: number of observations in brackets

**Table 2: Distribution of gender across occupational classes for grouped countries**

Occupational class	Female	Male	Total
<b>NORDIC COUNTRIES</b>			
Large employers	28.65	71.35	100.00
	259	645	904
Small business owners	35.34	64.66	100.00
	1,366	2,499	3,865
Technical professionals	22.59	77.41	100.00
	729	2,498	3,227
Production workers	18.99	81.01	100.00
	1,505	6,419	7,924
Managers	45.97	54.03	100.00
	2,704	3,178	5,882
Clerks	74.31	25.69	100.00
	2,522	872	3,394
Socio-cultural professionals	71.88	28.12	100.00
	4,043	1,582	5,625
Service workers	73.18	26.82	100.00
	7,137	2,616	9,753
Total	49.95	50.05	100.00
	20,265	20,309	40,574
<b>CONTINENTAL EUROPEAN COUNTRIES</b>			
Large employers	33.33	66.67	100.00
	581	1,162	1,743
Small business owners	42.64	57.36	100.00
	2,830	3,807	6,637
Technical professionals	21.23	78.77	100.00
	1,053	3,908	4,961
Production workers	26.02	73.98	100.00
	3,442	9,785	13,227
Managers	47.38	52.62	100.00
	5,108	5,674	10,782
Clerks	71.75	28.25	100.00
	6,191	2,437	8,628
Socio-cultural professionals	72.56	27.44	100.00
	6,379	2,412	8,791
Service workers	74.17	25.83	100.00
	9,107	3,172	12,279
Total	51.74	48.26	100.00
	34,691	32,357	67,048

*(Continues on the next page)*

Occupational class	Female	Male	Total
<b>SOUTHERN EUROPEAN AND ANGLO-SAXON COUNTRIES</b>			
Large employers	32.91	67.09	100.00
	439	895	1,334
Small business owners	39.03	60.97	100.00
	3,625	5,663	9,288
Technical professionals	25.30	74.70	100.00
	543	1,603	2,146
Production workers	32.18	67.82	100.00
	3,964	8,356	12,320
Managers	46.89	53.11	100.00
	2,594	2,938	5,532
Clerks	72.09	27.91	100.00
	4,619	1,788	6,407
Socio-cultural professionals	72.56	27.44	100.00
	3,509	1,327	4,836
Service workers	70.94	29.06	100.00
	9,253	3,791	13,044
Total	51.99	48.01	100.00
	28,546	26,361	54,907
<b>EASTERN EUROPEAN COUNTRIES</b>			
Large employers	40.94	59.06	100.00
	339	489	828
Small business owners	41.49	58.51	100.00
	2,088	2,945	5,033
Technical professionals	36.35	63.65	100.00
	1,198	2,098	3,296
Production workers	38.58	61.42	100.00
	8,149	12,972	21,121
Managers	61.78	38.22	100.00
	4,956	3,066	8,022
Clerks	79.62	20.38	100.00
	3,942	1,009	4,951
Socio-cultural professionals	80.88	19.12	100.00
	4,673	1,105	5,778
Service workers	70.23	29.77	100.00
	8,469	3,590	12,059
Total	55.35	44.65	100.00
	33,814	27,274	61,088

**Table 3: Descriptive statistics of age by occupational class and different grouped countries**

	<b>NORDIC COUNTRIES</b>		<b>CONTINENTAL EUROPEAN COUNTRIES</b>		<b>ANGLO-SAXON AND SOUTHERN EUROPEAN COUNTRIES</b>		<b>EASTERN EUROPEAN COUNTRIES</b>	
	Mean age	SD	Mean age	SD	Mean age	SD	Mean age	SD
Large employers	54.41	15.16	52.62	14.48	49.06	15.36	46.69	13.16
Small business owners	55.28	17.10	52.71	16.37	54.42	16.88	47.31	14.89
Technical professionals	46.71	15.54	47.29	16.20	45.39	16.25	49.69	16.85
Production workers	47.19	19.25	49.47	18.31	52.76	18.43	51.97	17.64
Managers	49.69	15.00	49.73	15.89	47.37	15.93	49.47	16.69
Clerks	50.31	18.82	48.26	17.47	47.22	17.04	48.92	17.21
Socio-cultural professionals	48.01	15.55	47.80	15.76	47.97	16.22	49.71	16.20
Service workers	44.56	19.90	47.39	18.25	46.88	18.33	48.21	17.59
Total	48.19	18.04	49.00	17.14	49.66	17.69	49.86	17.11

## Appendix 2.D: Robustness checks

**Table 1: Regression models additionally controlling for income**

VARIABLES	M1 Opposed to redistribution	M2 Favorable to immigration	M3 Tolerant to homosexuality	M4 Favorable to EU integration	M5 Ideology
Occupational class (Ref.category: Production workers)					
Large employers	0.463*** (0.017)	0.555*** (0.016)	0.260*** (0.015)	0.335*** (0.021)	0.406*** (0.039)
Small business owners	0.211*** (0.009)	0.173*** (0.009)	0.039*** (0.008)	0.079*** (0.011)	0.536*** (0.021)
Technical professionals	0.257*** (0.010)	0.353*** (0.010)	0.154*** (0.009)	0.182*** (0.013)	0.096*** (0.024)
Managers	0.295*** (0.008)	0.400*** (0.008)	0.179*** (0.007)	0.232*** (0.010)	0.263*** (0.019)
Clerks	0.100*** (0.009)	0.241*** (0.009)	0.143*** (0.008)	0.134*** (0.011)	0.175*** (0.021)
Socio-cultural professionals	0.124*** (0.009)	0.577*** (0.009)	0.212*** (0.008)	0.265*** (0.011)	-0.210*** (0.021)
Service workers	0.032*** (0.007)	0.115*** (0.007)	0.078*** (0.007)	0.068*** (0.009)	0.046** (0.018)
Labor market status (Ref. category: Insiders)					
Outsider	-0.038*** (0.009)	0.011 (0.008)	0.004 (0.008)	0.011 (0.010)	-0.023 (0.021)
Outside the labor market	-0.016* (0.007)	-0.013* (0.006)	-0.051*** (0.006)	0.052*** (0.008)	0.003 (0.015)
Unemployed	-0.104*** (0.011)	-0.049*** (0.011)	0.018+ (0.010)	-0.007 (0.014)	-0.185*** (0.027)
Trade Union Member	-0.133*** (0.006)	0.058*** (0.006)	0.041*** (0.006)	-0.017* (0.008)	-0.385*** (0.015)
Male	0.121*** (0.005)	0.053*** (0.005)	-0.144*** (0.005)	0.074*** (0.006)	0.108*** (0.012)
Age	-0.004*** (0.000)	-0.006*** (0.000)	-0.010*** (0.000)	-0.003*** (0.000)	0.004*** (0.000)
Income	0.049*** (0.001)	0.030*** (0.001)	0.015*** (0.001)	0.021*** (0.001)	0.059*** (0.003)
Constant	-0.198*** (0.029)	-0.309*** (0.029)	0.398*** (0.025)	-0.507*** (0.032)	4.095*** (0.068)
Country-round-FE	✓	✓	✓	✓	✓
Observations	164,111	150,994	161,336	106,103	151,208
R-squared	0.148	0.202	0.224	0.093	0.054

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

**Table 2: Regression models additionally including a control for parental level of education**

VARIABLES	M6 Opposed to redistribution	M7 Favorable to immigration	M8 Tolerant to homosexuality	M9 Favorable to EU integration	M10 Ideology
Occupational class (Ref.category: Production workers)					
Large employers	0.495*** (0.015)	0.489*** (0.014)	0.230*** (0.013)	0.276*** (0.019)	0.498*** (0.035)
Small business owners	0.222*** (0.008)	0.152*** (0.008)	0.028*** (0.007)	0.053*** (0.010)	0.571*** (0.019)
Technical professionals	0.284*** (0.010)	0.324*** (0.009)	0.153*** (0.009)	0.159*** (0.012)	0.160*** (0.022)
Managers	0.327*** (0.007)	0.374*** (0.007)	0.176*** (0.007)	0.214*** (0.009)	0.331*** (0.017)
Office clerks	0.122*** (0.008)	0.222*** (0.008)	0.138*** (0.007)	0.121*** (0.010)	0.205*** (0.019)
Socio-cultural professionals	0.140*** (0.008)	0.515*** (0.008)	0.189*** (0.007)	0.234*** (0.010)	-0.102*** (0.019)
Service workers	0.035*** (0.007)	0.093*** (0.007)	0.069*** (0.006)	0.053*** (0.008)	0.067*** (0.016)
Labor market status (Ref. category: Insiders)					
Outsider	-0.059*** (0.008)	-0.010 (0.008)	-0.019** (0.007)	-0.006 (0.009)	-0.054** (0.019)
Outside the labor market	-0.071*** (0.006)	-0.049*** (0.006)	-0.088*** (0.005)	0.014* (0.007)	-0.056*** (0.014)
Unemployed	-0.180*** (0.010)	-0.108*** (0.010)	-0.016+ (0.009)	-0.055*** (0.013)	-0.279*** (0.024)
Trade Union Member	-0.107*** (0.006)	0.066*** (0.006)	0.048*** (0.005)	-0.008 (0.007)	-0.337*** (0.014)
Male	0.117*** (0.005)	0.061*** (0.004)	-0.139*** (0.004)	0.073*** (0.006)	0.108*** (0.011)
Age	-0.003*** (0.000)	-0.005*** (0.000)	-0.009*** (0.000)	-0.002*** (0.000)	0.004*** (0.000)
Parental education level (Ref. category: Less than lower secondary)					
Lower secondary completed	0.035*** (0.007)	0.053*** (0.006)	0.017** (0.006)	0.037*** (0.008)	0.080*** (0.016)
Upper secondary completed	0.113*** (0.007)	0.128*** (0.006)	0.088*** (0.006)	0.073*** (0.008)	0.144*** (0.016)
Post-secondary non-tertiary education	0.179*** (0.015)	0.186*** (0.015)	0.099*** (0.014)	0.116*** (0.019)	0.094* (0.036)
Tertiary education completed	0.240*** (0.008)	0.325*** (0.008)	0.145*** (0.007)	0.194*** (0.010)	0.110*** (0.019)
Constant	0.023 (0.024)	-0.247*** (0.025)	0.416*** (0.022)	-0.440*** (0.026)	4.365*** (0.057)
Country-round-FE	✓	✓	✓	✓	✓
Observations	206,003	186,226	201,523	131,524	185,484
R-squared	0.139	0.200	0.229	0.101	0.047

Standard errors in parentheses

\*\*\* p&lt;0.001, \*\* p&lt;0.01, \* p&lt;0.05, + p&lt;0.10



**Appendix 2.E: Test for equality of variance (variance ratio tests) of the issue preferences and ideology of service vs. production workers controlling for socio-demographic factors**

Comparison	Opposed to redistribution		Favorable to immigration		Tolerant to homosexuality		Favorable to EU integration		Ideological self-placement	
	SD	P> f	SD	P> f	SD	P> f	SD	P> f	SD	P> f
Production workers	0.871	0.001	0.924	0.000	0.908	0.000	0.973	0.000	2.186	0.000
Service workers	0.885		0.908		0.839		0.926		2.121	

## Appendix 2.F: Regression models controlling for educational attainment

	M1	M2	M3	M4	M5
	Redistribution	Favorable to immigration	Tolerance towards homosexuality	Favorable to EU integration	Ideology
<b>VARIABLES</b>					
Occupational class (Ref.category: Production workers)					
Large employers	0.437*** (0.015)	0.349*** (0.014)	0.187*** (0.013)	0.238*** (0.019)	0.570*** (0.035)
Small business owners	0.210*** (0.008)	0.124*** (0.008)	0.019** (0.007)	0.048*** (0.010)	0.585*** (0.019)
Technical professionals	0.234*** (0.010)	0.205*** (0.009)	0.110*** (0.009)	0.118*** (0.012)	0.214*** (0.023)
Managers	0.277*** (0.008)	0.249*** (0.007)	0.130*** (0.007)	0.169*** (0.009)	0.381*** (0.018)
Office clerks	0.111*** (0.008)	0.175*** (0.008)	0.113*** (0.007)	0.112*** (0.010)	0.225*** (0.019)
Socio-cultural professionals	0.061*** (0.009)	0.343*** (0.008)	0.128*** (0.008)	0.170*** (0.011)	-0.049* (0.021)
Service workers	0.034*** (0.006)	0.086*** (0.006)	0.064*** (0.006)	0.056*** (0.008)	0.068*** (0.016)
Labor market status (Ref. category: Insiders)					
Outsider	-0.053*** (0.008)	0.006 (0.007)	-0.009 (0.007)	0.002 (0.009)	-0.055** (0.019)
Outside the labor market	-0.050*** (0.006)	-0.006 (0.005)	-0.066*** (0.005)	0.036*** (0.007)	-0.064*** (0.013)
Unemployed	-0.175*** (0.010)	-0.088*** (0.009)	-0.007 (0.009)	-0.049*** (0.012)	-0.286*** (0.024)
Education level (Ref. category: Less than lower secondary)					
Lower secondary completed	-0.038*** (0.008)	0.067*** (0.008)	0.070*** (0.007)	0.024* (0.011)	-0.001 (0.020)
Upper secondary completed	0.006 (0.008)	0.200*** (0.008)	0.136*** (0.007)	0.063*** (0.010)	0.033+ (0.020)
Post-secondary non-tertiary education	0.065*** (0.013)	0.280*** (0.013)	0.172*** (0.012)	0.106*** (0.017)	0.001 (0.032)
Tertiary education completed	0.194*** (0.009)	0.482*** (0.009)	0.220*** (0.008)	0.204*** (0.012)	-0.029 (0.022)
Trade Union Member	-0.118*** (0.006)	0.046*** (0.006)	0.037*** (0.005)	-0.017* (0.007)	-0.349*** (0.014)
Male	0.121*** (0.004)	0.056*** (0.004)	-0.143*** (0.004)	0.075*** (0.006)	0.106*** (0.011)
Age	-0.004*** (0.000)	-0.005*** (0.000)	-0.009*** (0.000)	-0.002*** (0.000)	0.003*** (0.000)
Constant	0.137*** (0.025)	-0.287*** (0.025)	0.359*** (0.022)	-0.414*** (0.027)	4.458*** (0.059)
Country-round-FE	✓	✓	✓	✓	✓
Observations	215,271	194,173	210,578	136,572	193,492
R-squared	0.138	0.212	0.229	0.101	0.046

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

### Appendix 3.A: Question wording and descriptive statistics

Variable	Wording	Valid N	Mean	SD	Min	Max
<b>Dependent variables</b>						
Ideology	In politics people sometimes talk of “left” and “right”. Using this card, where would you place yourself on this scale, where 0 means the left and 10 means the right?	134,757	5.131	2.198	0	10
Attitudes towards immigration	Factor scores predicted from the factor analyses of six survey items presented in the next appendix	136,700	-0.009	1.002	-2.382	2.246
Income redistribution	To what extent you agree or disagree with the statement: The government should take measures to reduce differences in income levels. (Higher values indicate disagreement)	152,753	0.000	1.000	-1.055	2.831
Tolerance towards gays and lesbians	To what extent you agree or disagree with the statement: Gay men and lesbians should be free to live their own life as they wish. (Higher values indicate agreement)	148,581	0.000	1.000	-2.293	1.054
Support for European Integration	Some say European unification should go further. Others say it has already gone too far. Using this card, what number on the scale best describes your position? (Higher values indicate it should go further)	103,541	0.000	1.000	-1.952	1.815
<b>Independent variables</b>						
Occupational class	Categorical variable measuring occupational classes based on Oesch's class scheme					
	- Self-employed professionals and large employers	2,886	0.020			
	- Small business owners	14,814	0.105			
	- (Associate) managers and administrators	19,297	0.137			
	- Office clerks	14,212	0.101			
	- Technical professionals and technicians	8,694	0.062			
	- Production workers	35,467	0.252			
	- Socio-cultural (semi-)professionals	15,733	0.112			
	- Service workers	29,825	0.212			

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	Categorical variable recoded from: type of contract of the respondent and main activity at the time of the survey:					
Labor market status	- Insiders (workers with a permanent contract)	68,538	0.441			
	- Outsiders (workers with a temporary or no contract)	13,903	0.089			
	- Outside the labor market	63,699	0.410			
	- Unemployed	9,157	0.059			
Age	Age in years (The sample has been limited to respondents who are at least 18 years old). In the regression models age is recoded so that 0 indicates the minimum age considered (i.e. 18 years)	154,691	49.592	18.020	18	123
Gender	Gender of the respondent. Coded 1 = Male	155,152	0.458	0.498	0	1
Union membership	"Are you or have you ever been member of a trade union or similar organization? If Yes, is that currently or previously?": Coded 1 for those who are member currently and 0 for all other responses	154,231	0.174	0.380	0	1
Education (Categorical):	"What is the highest level of education you have successfully completed?" Categories adapted to each country in which the survey was conducted and later recoded into the ESS Education Detailed ISCED Coding Frame.					
	- Less than lower secondary	20,361	0.132			
	- Lower secondary education completed	27,245	0.176			
	- Upper secondary education completed	61,529	0.398			
	- Post-secondary non-tertiary education	6,081	0.039			
	- Tertiary education completed	39,365	0.255			
Level-2 variables						
Politicization of redistribution		86	2.312	0.770	0.822	5.160
Politicization of the immigration issue		86	2.091	1.185	0.431	5.138
Politicization of the homosexuality issue		86	2.413	0.941	0.645	4.177
Politicization of European integration		63	1.351	0.545	0.397	2.855
Polarization on ideology		86	2.208	0.508	1.298	3.248

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*Macro-level socio-economic conditions*

Unemployment annual	Unemployment rate (annual average). Source: Eurostat	86	8.781	3.774	3.2	24.8
Total poverty rate	People at risk of poverty or social exclusion (percentage). Source: Eurostat	85	24.114	8.856	13.7	61.3
Poverty rate (after transfers)	People at risk of poverty rate after transfers (percentage). Cut-off point: 60% of median equivalized income after social transfers. Source: Eurostat	85	15.596	3.757	9	25.9
Gini Index	Gini coefficient of equivalized disposable income. Source: Eurostat	85	29.471	4.045	22.5	38.9
Total immigration	Total number of long-term immigrants arriving into the country during the year. Source: Eurostat	82	165,829	207,792	1,236	840,844
Asylum seekers	Number of asylum applicants. Source: Eurostat	62	12,507	18,033	15	77,485
Immigration from non-EU countries	Total number of long-term immigrants arriving into the country from non-EU countries	78	135,154	185,802	87	802,971
Country-wave observations	Countries and waves included in the sample: AT (3), BE (3-6), BG (3-6), CH (5-6), CZ (4-6), DE (3-6), DK (3-6), EE (3-6), ES (3-6), FI (3-6), FR (3-6), GB (3-6), GR (4, 5), HR (5), HU (3-6), IE (3-6), IT (6), LT (5-6), LV (3-4), NL (3-6), NO (5-6), PL (3-6), PT (3-6), RO (3-4), SE (3-6), SI (3-6), SK (3-6)					

### Appendix 3.B: Multi-level regression models with cross-level interactions

VARIABLES	M1 Opposed to redistribution	M2 Favorable to immigration	M3 Tolerant to homosexuality
Occupational class (Ref. category: Production workers)			
Large employers	0.242*** (0.063)	0.219*** (0.045)	0.054 (0.053)
Small business owners	0.077* (0.030)	0.077*** (0.022)	0.033 (0.027)
Technical professionals	0.100** (0.036)	0.072** (0.027)	0.007 (0.033)
Managers	0.127*** (0.028)	0.036+ (0.020)	0.033 (0.024)
Clerks	0.015 (0.030)	0.048* (0.022)	0.015 (0.027)
Socio-cultural professionals	-0.030 (0.031)	0.018 (0.022)	0.006 (0.026)
Service workers	-0.019 (0.023)	0.013 (0.017)	0.007 (0.021)
Labor market status (Ref. category: Insiders)			
Outsider	-0.061*** (0.009)	0.013 (0.009)	-0.011 (0.008)
Outside the labor market	-0.052*** (0.007)	-0.007 (0.007)	-0.075*** (0.006)
Unemployed	-0.173*** (0.012)	-0.098*** (0.012)	-0.011 (0.011)
Education level (Ref. category: Less Lower secondary completed)			
Upper secondary completed	-0.046*** (0.010)	0.090*** (0.011)	0.078*** (0.010)
Post-secondary non-tertiary education	-0.014 (0.010)	0.213*** (0.010)	0.154*** (0.009)
Tertiary education completed	0.032* (0.016)	0.290*** (0.016)	0.180*** (0.015)
Trade Union Member	0.173*** (0.011)	0.490*** (0.011)	0.228*** (0.011)
Male	-0.117*** (0.008)	0.050*** (0.007)	0.042*** (0.007)
Age	0.117*** (0.006)	0.051*** (0.006)	-0.146*** (0.005)
	-0.004*** (0.000)	-0.005*** (0.000)	-0.009*** (0.000)
Cross-level interactions (Ref. Large employers*Politicization of redistribution)			
Small business owners*Politicization of redistribution	0.085*** (0.025)		
Technical professionals*Politicization of redistribution	0.060*** (0.012)		
Managers*Politicization of redistribution	0.058*** (0.014)		
Office clerks*Politicization of redistribution	0.061*** (0.011)		
Socio-cultural professionals*Politicization of redistribution	0.039*** (0.011)		
Service workers*Politicization of redistribution	0.041*** (0.012)		
	0.023* (0.009)		

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Large employers*Politicization of immigration		0.064***	
		(0.017)	
Small business owners*Politicization of immigration		0.024**	
		(0.009)	
Technical professionals*Politicization of immigration		0.060***	
		(0.011)	
Managers*Politicization of immigration		0.094***	
		(0.008)	
Clerks*Politicization of immigration		0.056***	
		(0.009)	
Socio-cultural professionals*Politicization of immigration		0.135***	
		(0.009)	
Service workers*Politicization of immigration		0.031***	
		(0.007)	
Large employers*Politicization of rights of homosexuals			0.064**
			(0.021)
Small business owners*Politicization of rights of homosexuals			0.000
			(0.010)
Technical professionals*Politicization of rights of homosexuals			0.047***
			(0.013)
Managers*Politicization of rights of homosexuals			0.043***
			(0.009)
Clerks*Politicization of rights of homosexuals			0.040***
			(0.010)
Socio-cultural professionals*Politicization of rights of homosexuals			0.050***
			(0.010)
Service workers*Politicization of rights of homosexuals			0.025**
			(0.008)
Politicization of redistribution	0.033		
	(0.042)		
Politicization of immigration		-0.049	
		(0.033)	
Politicization of right of homosexuals			0.002
			(0.056)
Constant	-0.089	-0.140+	0.142
	(0.105)	(0.081)	(0.146)
<i>Random-effects parameters</i>			
Constant Std. Deviation	0.303	0.329	0.447
	(0.023)	(0.025)	(0.034)
Residual Std. Deviation	0.934	0.889	0.857
	(0.002)	(0.002)	(0.002)
Observations	137,408	123,581	133,814
Number of groups	86	86	86

VARIABLES	M4 Favorable to EU integration	M5 Ideology
Occupational class (Ref. category: Production workers)		
Large employers	0.231*** (0.059)	1.105*** (0.211)
Small business owners	-0.018 (0.030)	0.659*** (0.105)
Technical professionals	0.137*** (0.038)	0.583*** (0.124)
Managers	0.200*** (0.029)	0.761*** (0.096)
Clerks	0.133*** (0.032)	0.573*** (0.104)
Socio-cultural professionals	0.207*** (0.032)	1.191*** (0.102)
Service workers	0.039 (0.025)	0.246** (0.082)
Labor market status (Ref. category: Insiders)		
Outsider	0.020+ (0.011)	-0.085*** (0.022)
Outside the labor market	0.038*** (0.009)	-0.087*** (0.017)
Unemployed	-0.060*** (0.015)	-0.354*** (0.029)
Education level (Ref. category: Less than lower secondary)		
Lower secondary completed	0.033* (0.013)	-0.041 (0.026)
Upper secondary completed	0.068*** (0.013)	-0.027 (0.025)
Post-secondary non-tertiary education	0.106*** (0.020)	-0.080* (0.038)
Tertiary education completed	0.210*** (0.014)	-0.097*** (0.028)
Trade Union Member	-0.014 (0.009)	-0.349*** (0.018)
Male	0.065*** (0.007)	0.094*** (0.013)
Age	-0.003*** (0.000)	0.002*** (0.000)
Cross-level interactions (Ref. Production workers)		
Large employers*Politicization of EU integration	-0.001 (0.040)	
Small business owners*Politicization of EU integration	0.059** (0.020)	
Technical professionals *Politicization of EU integration	-0.018 (0.026)	
Managers*Politicization of EU integration	-0.031 (0.019)	
Office clerks*Politicization of EU integration	-0.020 (0.022)	
Socio-cultural professionals*Politicization of EU integration	-0.039+ (0.021)	
Service workers*Politicization of EU integration	0.009 (0.017)	

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Large employers*Polarization on ideology		-0.214*
		(0.091)
Small business owners*Polarization on ideology		-0.024
		(0.046)
Technical professionals*Polarization on ideology		-0.161**
		(0.055)
Managers*Polarization on ideology		-0.160***
		(0.042)
Office clerks*Polarization on ideology		-0.165***
		(0.045)
Socio-cultural professionals*Polarization on ideology		-0.538***
		(0.045)
Service workers*Polarization on ideology		-0.081*
		(0.036)
Politicization of European integration	0.091	
	(0.072)	
Ideological polarization		0.043
		(0.093)
Constant	-0.245*	4.922***
	(0.108)	(0.213)
<i>Random-effects parameters</i>		
Constant Std. Deviation	0.312	0.416
	(0.028)	(0.032)
Residual Std. Deviation	0.943	2.145
	(0.002)	(0.004)
Observations	93,837	122,772
Number of groups	63	86

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### Appendix 3.C: Multi-level regression models including additional controls at the country level

VARIABLES	M6 Opposed to redistribution	M7 Opposed to redistribution	M8 Opposed to redistribution	M9 Opposed to redistribution
Occupational class (Ref.category:				
Large employers	0.246*** (0.062)	0.234*** (0.062)	0.234*** (0.062)	0.234*** (0.062)
Small business owners	0.087** (0.029)	0.084** (0.030)	0.085** (0.030)	0.085** (0.030)
Technical professionals	0.105** (0.035)	0.113** (0.036)	0.114** (0.036)	0.114** (0.036)
Managers	0.138*** (0.028)	0.134*** (0.028)	0.135*** (0.028)	0.135*** (0.028)
Clerks	0.020 (0.029)	0.019 (0.029)	0.020 (0.029)	0.020 (0.029)
Socio-cultural professionals	-0.025 (0.030)	-0.035 (0.030)	-0.035 (0.030)	-0.035 (0.030)
Service workers	-0.021 (0.023)	-0.027 (0.023)	-0.027 (0.023)	-0.027 (0.023)
Labor market status (Ref. category: Insiders)				
Outsider	-0.061*** (0.009)	-0.060*** (0.009)	-0.060*** (0.009)	-0.060*** (0.009)
Outside the labor market	-0.052*** (0.007)	-0.051*** (0.007)	-0.051*** (0.007)	-0.051*** (0.007)
Unemployed	-0.173*** (0.012)	-0.173*** (0.012)	-0.173*** (0.012)	-0.173*** (0.012)
Education level (Ref. category: Less than lower secondary)				
Lower secondary completed	-0.046*** (0.010)	-0.045*** (0.010)	-0.045*** (0.010)	-0.045*** (0.010)
Upper secondary completed	-0.014 (0.010)	-0.012 (0.010)	-0.013 (0.010)	-0.013 (0.010)
Post-secondary non-tertiary education	0.032* (0.016)	0.032* (0.016)	0.031* (0.016)	0.031* (0.016)
Tertiary education completed	0.172*** (0.011)	0.173*** (0.011)	0.173*** (0.011)	0.173*** (0.011)
Trade Union Member	-0.117*** (0.008)	-0.116*** (0.008)	-0.116*** (0.008)	-0.116*** (0.008)
Male	0.117*** (0.006)	0.117*** (0.006)	0.117*** (0.006)	0.117*** (0.006)
Age	-0.004*** (0.000)	-0.004*** (0.000)	-0.004*** (0.000)	-0.004*** (0.000)
<i>Level-two variables</i>				
Annual unemployment	-0.038*** (0.007)			
Total poverty rate		-0.019*** (0.003)		
Poverty rate (after transfers)			-0.038*** (0.008)	

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Gini Index				-0.031*** (0.007)
Politicization of redistribution	0.027 (0.036)	-0.025 (0.036)	-0.003 (0.037)	0.036 (0.038)
<i>Cross-level interactive terms (Ref. category: Production workers)</i>				
Large employers*Politicization of redistribution	0.084*** (0.024)	0.087*** (0.024)	0.087*** (0.024)	0.087*** (0.024)
Small business owners*Politicization of redistribution	0.056*** (0.011)	0.057*** (0.011)	0.056*** (0.011)	0.056*** (0.011)
Technical professionals*Politicization of redistribution	0.055*** (0.014)	0.053*** (0.014)	0.053*** (0.014)	0.052*** (0.014)
Managers*Politicization of redistribution	0.056*** (0.011)	0.057*** (0.011)	0.057*** (0.011)	0.057*** (0.011)
Clerks*Politicization of redistribution	0.036** (0.011)	0.037** (0.011)	0.037** (0.011)	0.037** (0.011)
Socio-cultural professionals*Politicization of redistribution	0.039*** (0.012)	0.042*** (0.012)	0.042*** (0.012)	0.042*** (0.012)
Service workers*Politicization of redistribution	0.024** (0.009)	0.025** (0.009)	0.025** (0.009)	0.025** (0.009)
Constant	0.255* (0.112)	0.510*** (0.132)	0.589*** (0.167)	0.817*** (0.232)
<i>Random-effects parameters</i>				
Constant Std. Deviation	0.266 (0.020)	0.256 (0.020)	0.271 (0.021)	0.278 (0.021)
Residual Std. Deviation	0.934 (0.002)	0.934 (0.003)	0.934 (0.002)	0.934 (0.002)
Observations	137,408	135,892	135,892	135,892
Number of groups	86	85	85	85

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

VARIABLES	M10 Favorable to immigration	M11 Favorable to immigration	M12 Favorable to immigration
Occupational class (Ref. category: Production workers)			
Large employers	0.252*** (0.045)	0.253*** (0.053)	0.262*** (0.045)
Small business owners	0.090*** (0.022)	0.093*** (0.025)	0.094*** (0.022)
Technical professionals	0.093*** (0.028)	0.077* (0.031)	0.102*** (0.028)
Managers	0.066** (0.020)	0.034 (0.023)	0.074*** (0.020)
Office clerks	0.060** (0.023)	0.042 (0.026)	0.067** (0.023)
Socio-cultural professionals	0.052* (0.022)	0.028 (0.025)	0.063** (0.022)
Service workers	0.028 (0.018)	0.024 (0.020)	0.032+ (0.018)
Labor market status (Ref. category: Insiders)			
Outsider	0.013 (0.009)	0.024* (0.011)	0.012 (0.009)
Outside the labor market	-0.008 (0.007)	-0.002 (0.008)	-0.011 (0.007)
Unemployed	-0.099*** (0.012)	-0.096*** (0.013)	-0.110*** (0.012)
Education level (Ref. category: Less than lower secondary)			
Lower secondary completed	0.094*** (0.011)	0.089*** (0.013)	0.096*** (0.011)
Upper secondary completed	0.216*** (0.010)	0.209*** (0.012)	0.222*** (0.010)
Post-secondary non-tertiary education	0.294*** (0.016)	0.274*** (0.018)	0.301*** (0.016)
Tertiary education completed	0.497*** (0.011)	0.488*** (0.013)	0.506*** (0.012)
Trade Union Member	0.051*** (0.007)	0.056*** (0.009)	0.050*** (0.008)
Male	0.056*** (0.006)	0.040*** (0.006)	0.053*** (0.006)
Age	-0.005*** (0.000)	-0.005*** (0.000)	-0.005*** (0.000)
<i>Level-two variables</i>			
Total Immigration	0.000 (0.000)		
Asylum seekers		0.000* (0.000)	
Immigration from non-EU countries			0.000 (0.000)
Politicization of immigration	-0.032 (0.034)	-0.067 (0.043)	-0.035 (0.034)

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*Cross-level interactive terms* (Ref. category: Production workers)

Large employers*Politicization of immigration	0.053** (0.017)	0.047* (0.021)	0.050** (0.017)
Small business owners*Politicization of immigration	0.020* (0.009)	0.015 (0.010)	0.020* (0.009)
Technical professionals*Politicization of immigration	0.053*** (0.011)	0.057*** (0.013)	0.051*** (0.011)
Managers*Politicization of immigration	0.084*** (0.008)	0.092*** (0.009)	0.083*** (0.008)
Clerks*Politicization of immigration	0.053*** (0.009)	0.056*** (0.011)	0.053*** (0.009)
Socio-cultural professionals*Politicization of immigration	0.125*** (0.009)	0.126*** (0.010)	0.123*** (0.009)
Service workers*Politicization of immigration	0.028*** (0.007)	0.026** (0.008)	0.028*** (0.007)
Constant	-0.230** (0.086)	-0.161+ (0.095)	-0.204* (0.086)
<i>Random-effects parameters</i>			
Constant Std. Deviation	0.326 (0.026)	0.322 (0.029)	0.322 (0.026)
Residual Std. Deviation	0.879 (0.002)	0.887 (0.002)	0.876 (0.002)
Observations	119,064	90,905	113,922
Number of groups	82	62	78

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

VARIABLES	M13 Ideology	M14 Ideology	M15 Ideology
<i>Occupational class (Ref. category: Production workers)</i>			
Large employers	1.097*** (0.213)	1.106*** (0.211)	1.097*** (0.213)
Small business owners	0.681*** (0.106)	0.659*** (0.105)	0.681*** (0.106)
Technical professionals	0.639*** (0.127)	0.583*** (0.124)	0.639*** (0.127)
Managers	0.775*** (0.097)	0.762*** (0.096)	0.775*** (0.097)
Clerks	0.586*** (0.105)	0.573*** (0.104)	0.586*** (0.105)
Socio-cultural professionals	1.162*** (0.104)	1.192*** (0.102)	1.162*** (0.104)
Service workers	0.245** (0.084)	0.245** (0.082)	0.245** (0.084)
<i>Labor market status (Ref. category: Insiders)</i>			
Outsider	-0.084*** (0.022)	-0.085*** (0.022)	-0.084*** (0.022)
Outside the labor market	-0.087*** (0.017)	-0.087*** (0.017)	-0.087*** (0.017)
Unemployed	-0.352*** (0.029)	-0.353*** (0.029)	-0.352*** (0.029)
<i>Education level (Ref. category: Less than lower secondary)</i>			
Lower secondary completed	-0.038 (0.026)	-0.042 (0.026)	-0.038 (0.026)
Upper secondary completed	-0.027 (0.025)	-0.028 (0.025)	-0.026 (0.025)
Post-secondary non-tertiary education	-0.083* (0.039)	-0.080* (0.038)	-0.082* (0.039)
Tertiary education completed	-0.095*** (0.028)	-0.098*** (0.028)	-0.095*** (0.028)
Trade Union Member	-0.354*** (0.018)	-0.350*** (0.018)	-0.354*** (0.018)
Male	0.097*** (0.014)	0.093*** (0.013)	0.097*** (0.014)
Age	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)
<i>Level-two variables</i>			
Annual unemployment		-0.029* (0.011)	
Total poverty rate			-0.003 (0.005)
Gini Index	-0.010 (0.011)		
Ideological polarization	0.045 (0.095)	0.022 (0.090)	0.038 (0.100)

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Large employers*Ideological polarization	-0.211*	-0.214*	-0.211*
	(0.092)	(0.091)	(0.092)
Small business owners*Ideological polarization	-0.032	-0.024	-0.032
	(0.046)	(0.046)	(0.046)
Technical professionals *Ideological polarization	-0.184**	-0.162**	-0.184**
	(0.056)	(0.055)	(0.056)
(Associate) managers*Ideological polarization	-0.166***	-0.161***	-0.166***
	(0.043)	(0.042)	(0.043)
Office clerks*Ideological polarization	-0.170***	-0.166***	-0.170***
	(0.046)	(0.045)	(0.046)
Socio-cultural professionals*Ideological polarization	-0.526***	-0.538***	-0.525***
	(0.045)	(0.045)	(0.045)
Service workers*Ideological polarization	-0.080*	-0.081*	-0.080*
	(0.037)	(0.036)	(0.037)
Constant	5.205***	5.222***	4.989***
	(0.410)	(0.237)	(0.295)
<i>Random-effects parameters</i>			
Constant Std. Deviation	0.417	0.401	0.418
	(0.033)	(0.031)	(0.033)
Residual Std. Deviation	2.143	2.145	2.143
	(0.004)	(0.004)	(0.004)
Observations	121,602	122,772	121,602
Number of groups	85	86	85

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

## Appendix 4.A: Question wording and descriptive statistics

Variable	Wording	Valid N	Mean	SD	Min	Max
<b>Dependent variables</b>						
Party voted for	Party voted in the last national election. Coded into party families: - Abstention - Radical right parties - Mainstream right parties - Social-democratic parties - Radical left parties - Green parties - Other parties	8,802 1,382 12,230 7,087 1,261 1,096 2,616	0.256 0.040 0.355 0.206 0.037 0.032 0.076			
<b>Independent variables</b>						
Occupational class						
	Categorical variable measuring occupational classes based on Oesch's class scheme - Self-employed professionals and large employers - Small business owners - (Associate) managers - Office clerks - Technical professionals - Production workers - Socio-cultural professionals - Service workers	743 3,935 5,056 3,767 2,501 8,895 4,110 7,852	0.020 0.107 0.137 0.102 0.068 0.241 0.111 0.213			
Ideological distance	City-block distance between parties and voters on the ideological scale	139,466	0.258	0.187	0	0.989
Distance on redistribution	City-block distance between parties and voters on the issue of redistribution	143,931	0.297	0.205	0	0.983
Distance on immigration	Distance between parties and voters on the issue of immigration	134,781	0.244	0.185	0	1
Distance on rights of homosexuals and lesbians	Distance between parties and voters on the issue of the rights of gays and lesbians	141,887	0.306	0.225	0	1
Labor market status						
	Categorical variable recoded from: type of contract of the respondent and main activity at the time of the survey: - Insiders (workers with a permanent contract) - Outsiders (workers with a temporary or no contract) - Outside the labor market - Unemployed	17,824 3,509 16,943 2,658	0.435 0.086 0.414 0.065			



Age	Age in years (The sample has been limited to respondents who are at least 18 years old). In the regression models age is recoded so that 0 indicates the minimum age considered (i.e. 18 years)	40,853	49,304	18,594	18	103
Gender	Gender of the respondent. Coded 1 = Male	40,917	0.463	0.499	0	1
Union membership	"Are you or have you ever been member of a trade union or similar organization? If Yes, is that currently or previously?". Coded 1 for those who are member currently and 0 for all other responses	40,706	0.170	0.376	0	1
Education (Categorical):	"What is the highest level of education you have successfully completed?" Categories adapted to each country in which the survey was conducted and later recoded into the ESS Education Detailed ISCED					
	- Less than lower secondary	4,699	0.116			
	- Lower secondary education completed	7,502	0.185			
	- Upper secondary education completed	15,237	0.376			
	- Post-secondary non-tertiary education	2,207	0.054			
	- Tertiary education completed	10,884	0.268			
Countries	Countries included in the sample: BE, BG, CH, CZ, DE, DK, EE, ES, FI, FR, GB, HU, IE, LT, NL, NO, PL, PT, SE, SI, SK					

## Coding of variables: Classification of parties into party families

Country	Party Abbrev.	Party Name	Party Family
Belgium	PS	Socialist Party	Social-democrats
	SP.A	Socialist Party Different	Social-democrats
	ECOLO	Ecolo	Green
	Groen	Agalev; Green!	Green
	MR	Liberal Reformist Party	Mainstream right
	VLD	Open Flemish Liberals and Democrats	Mainstream right
	CDH	Humanist Democratic Centre	Mainstream right
	CD&V	Christian Democratic & Flemish	Mainstream right
	NVA	New Flemish Alliance	Others
	VB	Flemish Bloc; Flemish Interest	Radical right
FN	National Front	Radical right	
Denmark	SD	Social Democrats	Social-democrats
	RV	Radical Left-Social Liberal Party	Others
	KF	Conservative People's Party	Mainstream right
	SF	Socialist People's Party	Radical left
	V	Liberal Party of Denmark	Mainstream right
	EL	Progress Party	Radical left
	DF	Danish People's Party	Radical right
	LA	Liberal Alliance	Mainstream right
KRF	Christian People's Party	Others	
Germany	CDU/CSU	Christian Democratic Union of Germany	Mainstream right
	SPD	Social Democratic Party of Germany	Social-democrats
	FDP	Free Democratic Party	Mainstream right
	Gruenen	The Greens	Green
	LINKE	The Left	Radical left
Spain	PSOE	Spanish Socialist Workers' Party	Social-democrats
	PP	People's Party	Mainstream right
	IU	United Left	Radical Left
	CiU	Convergence and Unity	Others
	PNV	Basque Nationalist Party	Others
	ERC	Republican Left of Catalonia	Others
	BNG	Galician Nationalist Bloc	Others
	UPD	Union, Progress, and Democracy	Others
France	PCF	French Communist Party	Radical left
	PS	Socialist Party	Social-democrats
	VERTS	Green Party	Green
	UMP	Union for Popular Movement	Mainstream right
	FN	National Front	Radical left
	MODEM	Democratic Movement	Mainstream right
Ireland	FF	Fianna Fáil	Mainstream right
	FG	Fine Gael	Mainstream right
	LAB	Labour	Social-democrats
	GP	Green Party	Green
	SF	Sinn Féin	Others
The Netherlands	CDA	Christian Democratic Appeal	Mainstream right
	PvdA	Labour Party	Social-democrats
	VVD	People's Party for Freedom and Democracy	Mainstream right
	D66	Democrats 66	Others
	GL	GreenLeft	Green
	SP	Socialist Party	Radical left
	CU	ChristianUnion	Others
	PVV	Party for Freedom	Radical right
PvdD	Party for the Animals	Others	

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United Kingdom	CON	Conservative Party	Mainstream right
	LAB	Labour Party	Social-democrats
	LIB	Liberal Democratic Party	Mainstream right
	SNP	Scottish National Party	Others
	PLAID	Party of Wales	Others
	GREEN	Green Party	Green
Portugal	CDU	Democratic Unitarian Coalition	Radical left
	CDS/PP	People's Party	Mainstream right
	PS	Socialist Party	Social-democrats
	PSD	Democratic People's Party	Mainstream right
	BE	Left Bloc	Radical left
	Finland		
	SDP	Social Democratic Party of Finland	Social-democrats
	KOK	National Coalition Party	Mainstream right
	KESK	Finnish Center Party	Others
	VAS	Left Alliance	Radical left
	PS	True Finns	Radical right
	SFP	Swedish People's Party	Others
	VIHR	Green League	Green
	KD	Christian-Democrats	Others
Sweden	V	Left Party	Radical left
	SAP	Workers' Party-Social Democrats	Social-democrats
	C	Center Party	Others
	FP	Liberal People's Party	Mainstream right
	M	Moderate Party	Mainstream right
	KD	Christian-Democrats	Mainstream right
	MP	The Greens	Green
	SD	Sweden Democrats	Radical right
Bulgaria	ODS	United Democratic Forces	Mainstream right
	KzB	Coalition for Bulgaria	Social-democrats
	DPS	Movement for Rights and Freedoms	Mainstream right
	NOA	National Union Attack	Radical right
	GERB	Citizens for European Delopment of Bulgaria	Mainstream right
Czech Republic	CSSD	Czech Social Democratic Party	Social-democrats
	ODS	Civic Democratic Party	Mainstream right
	KSCM	Communist Party of Bohemia and Moravia	Radical left
	TOP09	Top09	Mainstream right
	VV	Public Affairs	Mainstream right
Estonia	IRL	Pro Patria and Res Publica Union	Mainstream right
	EK	Estonian Center Party	Others
	ER	Estonian Reform Party	Mainstream right
	SDE	Social Democratic Party	Social-democrats
	EER	Estonian Greens	Green
Hungary	MSZP	Hungarian Socialist Party	Social-democrats
	FIDESZ	Hungarian Civic Union	Mainstream right
	MDF	Hungarian Democratic Forum	Mainstream right
	SZDSZ	Alliance of Free Democrats	Mainstream right
	JOBBIK	Christian Democratic People's Party	Radical right
	LMP	Politics Can Be Different	Green
Lithuania	LSDP	Social Democratic Party of Lithuania	Social-democrats
	LiCS	Liberal Union of Lithuanian	Mainstream right
	TS	Homeland Union	Others
	LVLS/LVP	Lithuanian Peasant Party	Others
	LLRA	Electoral Action of Lithuania's Poles	Others
	TT	Order and Justice	Mainstream right
	DP	Labour Party	Social-democrats
	LRLS	Liberals' Movement of the Republic of Lithuania	Social-democrats

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Poland	SLD	Alliance of Democratic Left	Social-democrats
	PO	Civic Platform	Mainstream right
	PiS	Law and Justice Party	Radical right
	PSL	Polish People's Party	Others
Slovakia	SDKU-DS	Slovak Democratic and Christian Union	Mainstream right
	Smer	Direction-Third Way	Social-democrats
	KDH	Christian Democratic Movement	Mainstream right
	SaS	Freedom and Solidarity	Mainstream right
	Most	Bridge	Mainstream right
Slovenia	LDS	Liberal Democracy of Slovenia	Mainstream right
	SDS	Social Democratic Party of Slovenia	Social-democrats
	SLS-SMS	Slovenian People's Party	Mainstream right
	NSI	New Slovenia	Mainstream right
	DeSUS	Democratic Party of Pensioners of Slovenia	Others
	SNS	Slovenian National Party	Radical right
	Zares	Zares-For Real	Others
Norway	DNA	Labour Party	Social-democrats
	FrP	Progress Party	Radical right
	H	Conservative Party	Mainstream right
	SV	Socialist Left Party	Radical left
	Sp	Center Party	Others
	KrF	Christian Democrats	Mainstream right
	V	Liberal Party	Others
Switzerland	SVP/UDC	Swiss People's Party	Radical right
	SPS/PSS	Social-Democrats	Social-democrats
	FDP/PLR	Free Democratic Party	Mainstream right
	CVP/PVC	Christian Democrats	Mainstream right
	GPS/PES	Green Party	Green
	GLP/PVL	Green Liberal Party	Green
	PdA/PST-POP	Swiss Labour Party	Radical left
BDP	Conservative Democratic Party of Switzerland	Mainstream right	

Adaptation from CHES' coding of party into families.

**Appendix 4.B: Multinomial conditional logistic model of vote for different party families  
(Base category: Abstention)**

VARIABLES	Radical right/ Abstention	Mainstream right/ Abstention	Social Democrats/ Abstention	Radical Left/ Asbtention	Green parties/ Abstention	Other Parties/ Abstention
Occupational class (Ref.category: Production workers)						
Large employers	-0.008 (0.263)	1.351*** (0.125)	0.380* (0.155)	-0.015 (0.307)	2.207*** (0.234)	1.062*** (0.184)
Small business owners	0.409*** (0.103)	0.752*** (0.056)	-0.070 (0.070)	-0.272+ (0.142)	1.158*** (0.159)	0.757*** (0.086)
Technical professionals	0.174 (0.123)	0.827*** (0.068)	0.479*** (0.077)	0.447*** (0.132)	1.612*** (0.160)	0.501*** (0.109)
Managers	-0.020 (0.116)	1.197*** (0.055)	0.755*** (0.062)	0.394*** (0.119)	1.742*** (0.142)	0.806*** (0.086)
Clerks	-0.019 (0.123)	0.626*** (0.059)	0.427*** (0.066)	0.311* (0.122)	1.238*** (0.156)	0.518*** (0.094)
Socio-cultural professionals	-0.231+ (0.137)	0.989*** (0.062)	0.811*** (0.068)	1.006*** (0.111)	2.176*** (0.141)	0.781*** (0.095)
Service workers	0.051 (0.090)	0.169*** (0.046)	0.167** (0.051)	0.029 (0.100)	0.677*** (0.142)	0.174* (0.075)
Labor market status (Ref. category: Insiders)						
Outsider	-0.059 (0.114)	-0.095+ (0.055)	-0.143* (0.065)	-0.066 (0.117)	-0.056 (0.114)	0.168* (0.085)
Outside the labor market	0.023 (0.082)	-0.186*** (0.041)	-0.090+ (0.047)	-0.078 (0.088)	-0.219* (0.092)	0.048 (0.066)
Unemployed	-0.601*** (0.152)	-0.601*** (0.063)	-0.360*** (0.072)	-0.016 (0.125)	-0.627*** (0.168)	-0.144 (0.100)
Trade Union Member	0.878*** (0.078)	0.676*** (0.048)	1.181*** (0.051)	1.233*** (0.077)	1.153*** (0.083)	1.039*** (0.067)
Male	0.488*** (0.068)	0.168*** (0.033)	0.186*** (0.038)	0.274*** (0.071)	-0.160* (0.076)	0.231*** (0.053)
Age	0.014*** (0.002)	0.023*** (0.001)	0.030*** (0.001)	0.021*** (0.002)	0.000 (0.002)	0.017*** (0.002)
Constant	-1.977*** (0.107)	-0.880*** (0.053)	-1.560*** (0.061)	-2.590*** (0.118)	-2.542*** (0.145)	-2.417*** (0.087)
Observations	182,306	182,306	182,306	182,306	182,306	182,306

Coefficients are Logit Coefficients, standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

**Appendix 4.C: Results from regression models of voting on distance between parties and voters on different issues and ideology**

VARIABLES	M1 Party voted	M2 Party voted	M3 Party voted	M4 Party voted	M5 Party voted	M6 Party voted
Ideological distance	-5.366*** (0.069)		-4.612*** (0.138)			
Dist. on redistribution		-1.807*** (0.060)		-1.886*** (0.058)	-2.290*** (0.111)	-1.893*** (0.058)
Dist. on immigration		-1.669*** (0.075)		-1.178*** (0.142)	-1.752*** (0.072)	-1.662*** (0.072)
Dist. on rights of homosexuals		-0.909*** (0.066)		-0.938*** (0.065)	-0.950*** (0.065)	-0.551*** (0.111)
<i>Interactions with distance (Ref. Production workers)</i>						
Large employers*Ideology			-1.735*** (0.466)			
Small business owners*Ideology			-0.620 (0.239)			
Technical professionals*Ideology			-1.709** (0.282)			
Managers*Ideology			-1.494*** (0.218)			
Clerks*Ideology			-0.567* (0.244)			
Socio-cultural professionals*Ideology			-1.645*** (0.235)			
Service workers*Ideology			0.007 (0.196)			
Large employers*Immigration				-0.162 (0.356)		
Small business owners*Immigration				-0.001 (0.219)		
Technical professionals*Immigration				-0.817*** (0.235)		
Managers*Immigration				-0.852*** (0.194)		
Clerks*Immigration				-0.400+ (0.222)		
Socio-cultural professionals*Immigration				-1.824*** (0.205)		
Service workers*Immigration				-0.251 (0.189)		

*(Continues on the next page)*

Large employers*Redistribution					0.637*	(0.303)
Small business owners*Redistribution					0.985***	(0.169)
Technical professionals*Redistribution					0.636**	(0.188)
Managers*Redistribution					0.487**	(0.151)
Clerks*Redistribution					0.553**	(0.173)
Socio-cultural professionals*Redistribution					0.367*	(0.161)
Service workers*Redistribution					0.140	(0.146)
Large employers*Rights of homosexuals					-0.472	(0.316)
Small business owners*Rights of homosexuals					-0.075	(0.173)
Technical professionals*Rights of homosexuals					-0.850***	(0.193)
Managers*Rights of homosexuals					-0.865***	(0.158)
Clerks*Rights of homosexuals					-0.148	(0.182)
Socio-cultural professionals*Rights of homosexuals					-1.300**	(0.174)
Service workers*Rights of homosexuals					-0.164	(0.151)
Observations	123,968	123,968	123,968	123,968	123,968	123,968

Coefficients are Logit Coefficients, standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

*Note:* Because case-specific variables (characteristics of respondents such as age, labor market status, or social class) have to be estimated (and introduced in the models) interacted with each of the alternative (party) specific constants, this generates several coefficients for these variables. Because of the extension of these models I only present the results for the alternative-specific variables (distances and interactions with distance) which are estimated as generic coefficients for all parties.

**Appendix 4.D: Multinomial conditional logistic model of vote for different party families controlling for educational attainment (Odds ratios reported)**

VARIABLES	Radical right / Abstention	Mainstream right / Abstention	Social Democrats / Abstention	Radical Left / Abstention	Greens / Abstention
Occupational class (Ref.category: Production workers)					
Large employers	1.160 (0.310)	2.541*** (0.326)	1.143 (0.180)	0.586+ (0.183)	4.162*** (1.006)
Small business owners	1.594*** (0.167)	1.887*** (0.107)	0.848* (0.060)	0.628** (0.091)	2.270*** (0.370)
Technical professionals	1.343* (0.173)	1.599*** (0.114)	1.302** (0.105)	1.010 (0.141)	2.523*** (0.422)
Managers	1.127 (0.138)	2.242*** (0.132)	1.666*** (0.111)	0.925 (0.118)	2.765*** (0.414)
Office clerks	1.017 (0.127)	1.592*** (0.095)	1.391*** (0.093)	1.138 (0.141)	2.464*** (0.391)
Socio-cultural professionals	0.977 (0.145)	1.588*** (0.110)	1.626*** (0.124)	1.428** (0.182)	3.513*** (0.539)
Service workers	1.084 (0.098)	1.134** (0.053)	1.143** (0.059)	0.968 (0.097)	1.733*** (0.247)
Labor market status (Ref. category: Insiders)					
Outsider	0.913 (0.105)	0.958 (0.053)	0.903 (0.059)	0.997 (0.118)	1.048 (0.120)
Outside the labor market	0.999 (0.083)	0.920* (0.039)	0.974 (0.047)	1.032 (0.091)	0.970 (0.091)
Unemployed	0.547*** (0.084)	0.613*** (0.039)	0.752*** (0.055)	1.108 (0.140)	0.630** (0.107)
Trade Union Member	2.441*** (0.191)	1.875*** (0.092)	3.171*** (0.162)	3.223*** (0.249)	2.939*** (0.245)
Male	1.638*** (0.112)	1.168*** (0.039)	1.197*** (0.046)	1.293*** (0.092)	0.839* (0.064)
Age	1.015*** (0.002)	1.028*** (0.001)	1.033*** (0.001)	1.026*** (0.003)	1.008** (0.003)
Education level (Ref. category: Less than lower secondary)					
Lower secondary completed	1.300* (0.159)	1.323*** (0.082)	0.970 (0.064)	1.304* (0.176)	2.787** (0.934)
Upper secondary completed	1.151 (0.138)	1.756*** (0.101)	1.271*** (0.077)	1.645*** (0.201)	6.704*** (2.108)
Post-secondary non- tertiary education	0.939 (0.179)	2.295*** (0.191)	1.426*** (0.132)	1.988*** (0.345)	11.277*** (3.747)
Tertiary education completed	0.877 (0.127)	3.283*** (0.222)	1.891*** (0.139)	3.686*** (0.508)	17.602*** (5.610)
Constant	0.119*** (0.019)	0.218*** (0.017)	0.161*** (0.014)	0.041*** (0.007)	0.011*** (0.004)
Observations	180,988	180,988	180,988	180,988	180,988

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10



## Appendix 5.A: Question wording and descriptive statistics

Variable	Wording	Valid N	Mean	SD	Min	Max
<b>Dependent variables</b>						
Economic preferences	Average score from four different items asked on a Likert scale, inquiring respondents to what extent they agreed or disagreed with the following statements: (i) <i>'Private enterprise is the best way to solve Britain's economic problems'</i> (ii) <i>'Major public services and industries ought to be in state ownership'</i> (iii) <i>'It is the government's responsibility to provide a job for everyone who wants one'</i> (iv) <i>'Strong trade unions are needed to protect the working conditions and wages of employees'</i>	81,980	2.787	0.667	1	5
Cultural preferences (Tolerance towards homosexuality)	Item asked on a Likert scale, inquiring respondents to what extent they agreed or disagreed with the following statement: <i>'Homosexual relationships are wrong'</i>	81,218	3.235	1.192	1	5
Party preferences	Derived variable constructed from three different items inquiring: (i) Whether the respondent supports a particular party and, if so, which party? (ii) In case the respondent does not support any particular party, whether there is one party that he/she feels closer to than all others and, if so, which party? (iii) In case the respondent does not feel closer to any particular party, which party he/she would hypothetically vote for if elections were to be held the next day? For each respondent there is information on only one of these three items, because the first two items act as filters. Based on the information available for each respondent party preference is coded as: 1. Prefers the Labour party 2. Prefers the Conservative party or the Liberal Democrats 3. Does not report a party preference (All other parties are set as missing values)	68,890 65,741 59,727	0.354 0.338 0.307			
<b>Independent variables</b>						
Occupational class	Categorical variable measuring occupational classes based on Oesch's class scheme - Self-employed professionals and large employers - Small business owners - (Associate) managers and administrators - Office clerks - Technical professionals and technicians - Production workers - Socio-cultural (semi-)professionals - Service workers	110,821 2,931 11,953 7,531 19,405 7,531 23,051 13,374 25,045	0.026 0.108 0.068 0.175 0.068 0.208 0.121 0.226			

Class tenure	Time an individual has (uninterruptedly) been in a specific class (further details in Appendix 4.C)	125,702	4.111	5.187	0.003	50.794
Age	Age in years	238,983	45.278	18.644	16	65
Gender	Gender of the respondent. (Coded 1 = Male)	238,992	0.461	0.499	0	1
Region	Categorical variable indicating the region where respondent was living at the time of the survey.	237,730				
	- England	146,383	0.616			
	- Wales	32,012	0.135			
	- Scotland	36,681	0.154			
	- Northern Ireland	22,654	0.095			
Wave	Indicator variable for the different waves of the panel.	238,992			1	18
<b>Additional control variables in robustness checks</b>						
Education (Categorical):	"What is the highest level of education you have successfully completed?" Categories coded into the ISCED Coding Frame.	224,432				
	- Primary	59,965	0.267			
	- Low secondary	3,894	0.017			
	- Low secondary/vocational	67,702	0.302			
	- High secondary/Middle vocational	27,315	0.122			
	- Higher vocational	39,322	0.175			
	- First degree tertiary	20,956	0.093			
	- Higher degree tertiary	5,278	0.024			
Income	Derived variable: total individual income perceived the month prior to the survey	233,364	1115.385	1165.361	0	72,176.51
Part-time employment	Measure based on total hours, i.e. including both normal and overtime hours. It is computed for both employees and the self-employed.	139,902				
	- Full-time: 30 hours or more	107,479	107,479			
	- Part-time: Less than 30 hours	32,423	32,423			

## Appendix 5.B: Results from factor analysis on economic preferences

Survey items	Factor 1	Factor 2
To what extent do you agree or disagree with the following statements...		
... ordinary people share the nation's wealth (Response scale reversed)	0.0218	0.8597
... there is one law for the rich and one for the poor	0.1662	0.7732
... private enterprise is the best way to solve Britain's economic problems (Response scale reversed)	0.4834	0.3217
... major public services and industries ought to be in state ownership	0.6095	0.1378
... it is the government's responsibility to provide a job for everyone who wants one	0.6946	0.0680
... strong trade unions are needed to protect the working conditions and wages of employees	0.7238	0.7238

Note: Factor loadings after orthogonal varimax rotation. 2 components extracted, eigenvalue of Factor 1: 2.051, eigenvalue of Factor 2: 1.058. Number of observations included in the analysis 75,007

### **Appendix 5.C: Coding of class tenure**

Class tenure is coded in a merged dataset that merges information from the INDRESP and JOBHIST records for each of the BHPS waves. For each respondent in this merged dataset information is available on: (i) the job at the current wave, with information on the characteristics of this job (e.g. whether it is as employee or self-employed, when this job started, ISCO codes) and (ii) every change in job spells for the past 18 months with the respective information on each spell (a change in job spell is defined as a change of job with a different employer or with the same employer, as well as changes in employment status like becoming unemployed or retiring). Hence, the data is structured as a stacked dataset in which each line corresponds to one job/non-employment spell of one respondent at a specific wave. Thus, this information is nested by respondent and wave. This stacked dataset is used for the purpose of computing tenure, once tenure is computed only information on the most recent spell is kept for each respondent. As such, the data on which the regression models are estimated is constituted by one line (row) for each respondent and wave.

Class tenure is computed on the basis of the length of time that an individual has been in the class location that he/she reports at the time of the survey. Individuals can enter a class location: from a different class or from a non-employment status. To measure the beginning of a specific class location I rely on information about the first job in that class, this is available both for jobs in the INDRESP record file and in the JOBHIST record file. Hence, for each respondent and wave we need to go back to each of the job and unemployment spells held by this respondent before he/she is being interviewed and identify the first one that corresponds to the current class and that differs from the immediately previous spell (because he/she was earlier in another class or out of employment). If an individual reports having changed jobs, but the previous job was in the same Oesch's class as the current job is, then information on the previous job is used, until the first job within the same class is found. It is possible to track entrance into a class long before the first wave of the panel because in the first wave, individuals are asked about the job they hold at that time and when it started, and also retrospectively about past jobs. In practice, by merging data from different BHPS records it is possible to track employment careers as far as the time when the respondent left full-time education.

Respondents are always asked about the year, month, and day when a specific job started. For those cases where information on the day is missing day 15 of the month was imputed.

Because there might be inconsistencies in the way that respondents reply to survey items (e.g. the date of a job that started long before the time the respondent is interviewed might differ from wave to wave), in case of inconsistencies in dates the information on the wave that was closest to the event is preferred. I assume that information that is closer to the actual event will be more accurate. To also address inconsistencies in respondents' answers the date of entrance into a class is "cut" if the respondent reports having changed classes between waves (or in previous spells) but the date of the beginning of the current job goes beyond the last time the individual was interviewed (and hence in principle beyond the time when he/she changed classes). To these individuals the day of the last interview is set as the date the current job began.

The calculation of entrance into a class also required some imputation, in some cases, individuals will not report the date a specific job began across different waves. In this case, if the respondent reports not having changed jobs between waves, and the class location is stable across consecutive waves, then I impute as day of entrance into the class the date of the earliest interview since when the respondent has not reported a job or class change. I do so, because we can assume that if the respondent has always held the same class, and there have been no changes to the employment situation in subsequent waves, we can assume that, at least since the day of that interview in which he/she reports this class location, the respondent has been permanently stable within the same class location. This is only imputed for respondents who report information on occupation for each of the concerned waves (hence we can assign them into classes for each of these waves) and who also explicitly report not having changed jobs or experienced spells of unemployment or out of employment between waves.

Once the date of class entrance is computed, class tenure is simply calculated by subtracting this date from the date of the interview.

**Appendix 5.D: Linear probability models of the moderating role of tenure in the association between class and party preferences**

	(1)	(2)	(3)
	Labour vs. Conservatives + Liberal Democrats	No preferred party vs. Conservatives + Liberal Democrats	Labour vs. No preferred party
Class (Ref. Production workers)			
Large employers	-0.055*** (0.012)	-0.089*** (0.015)	-0.014 (0.017)
Small business owners	-0.032*** (0.008)	-0.068*** (0.009)	-0.021* (0.009)
Technical professionals	-0.041*** (0.008)	-0.085*** (0.011)	0.020+ (0.010)
Managers	-0.045*** (0.006)	-0.078*** (0.008)	0.005 (0.008)
Clerks	-0.030*** (0.007)	-0.060*** (0.009)	0.009 (0.008)
Socio-cultural professionals	-0.025** (0.008)	-0.077*** (0.011)	0.050*** (0.010)
Service workers	-0.002 (0.007)	-0.012 (0.008)	-0.005 (0.007)
Tenure (in years)	0.002** (0.001)	0.000 (0.001)	0.003*** (0.001)
Interactive terms			
Large employers*Tenure	-0.001 (0.003)	0.003 (0.004)	-0.001 (0.004)
Small business owners*Tenure	-0.004** (0.001)	0.002 (0.002)	-0.005* (0.002)
Technical professionals*Tenure	-0.002 (0.001)	-0.001 (0.002)	-0.005** (0.002)
Managers*Tenure	-0.000 (0.001)	-0.004** (0.001)	0.001 (0.001)
Clerks*Tenure	-0.003** (0.001)	-0.004** (0.001)	-0.003* (0.001)
Socio-cultural professionals*Tenure	-0.003** (0.001)	-0.004** (0.001)	-0.002 (0.001)
Service workers*Tenure	-0.003** (0.001)	-0.002 (0.001)	-0.001 (0.001)
Age	-0.002*** (0.000)	-0.006*** (0.000)	0.004*** (0.000)
Male	-0.013 (0.008)	-0.045*** (0.007)	0.027*** (0.008)
Wave-FE	✓	✓	✓
Region-FE	✓	✓	✓
Constant	0.483*** (0.013)	0.568*** (0.013)	0.380*** (0.014)
Observations	68,009	63,648	63,912
Number of individuals	11,641	12,099	12,494

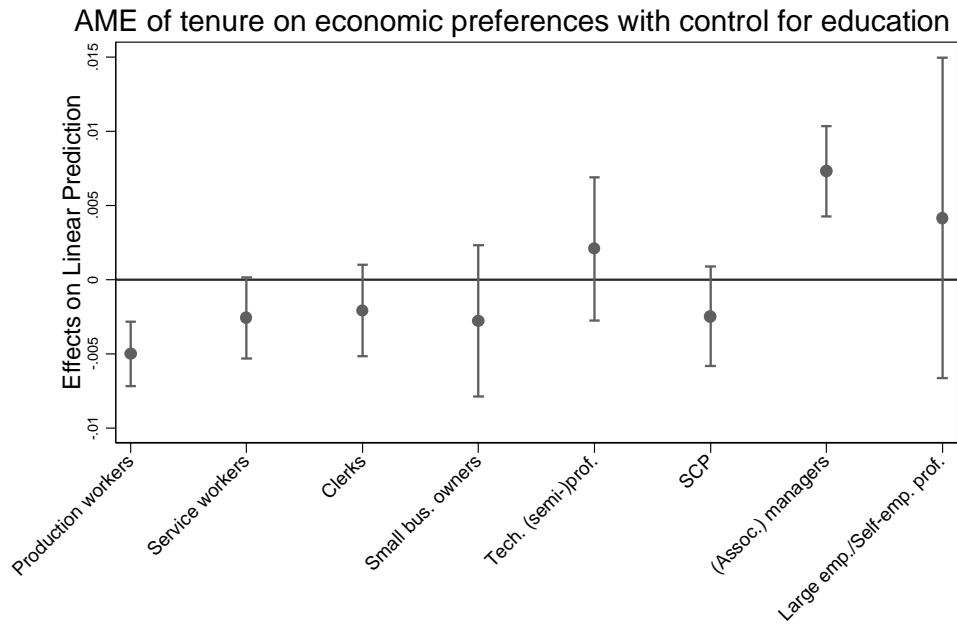
Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

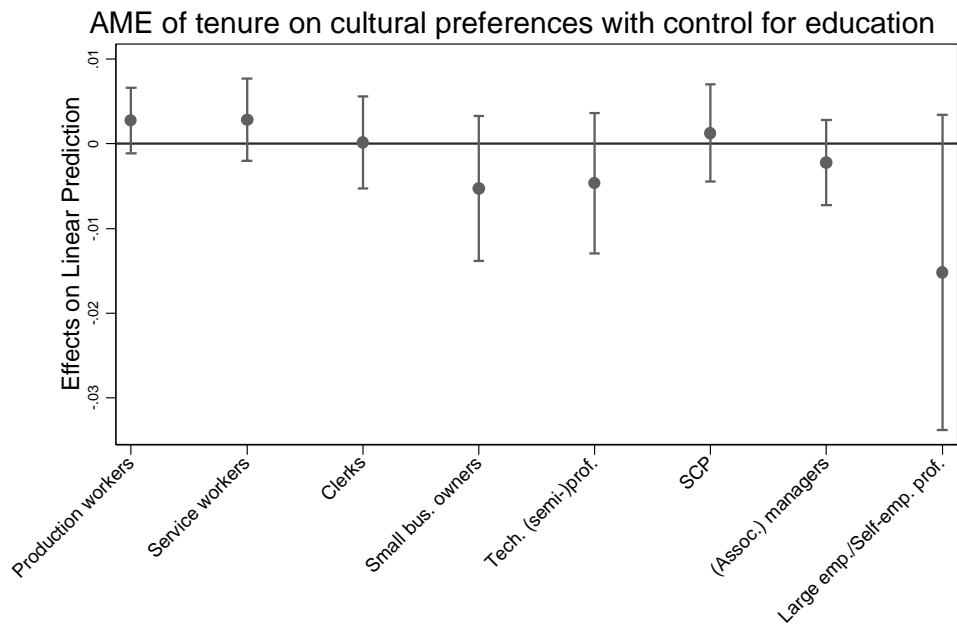
## Appendix 5.E: Robustness checks

### 1. Results from regression models adding control variables (education, part-time work, income)

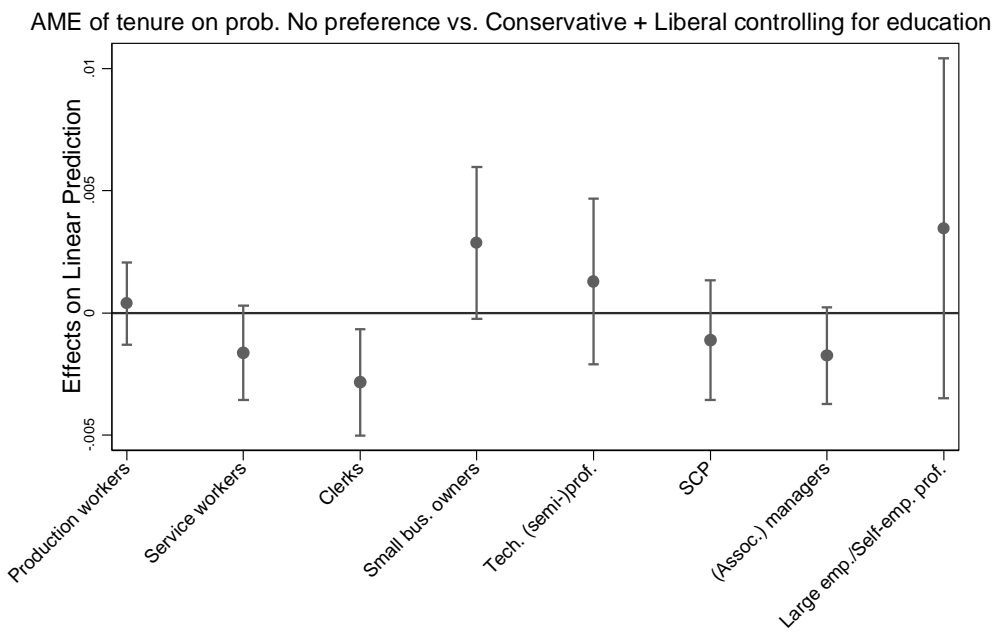
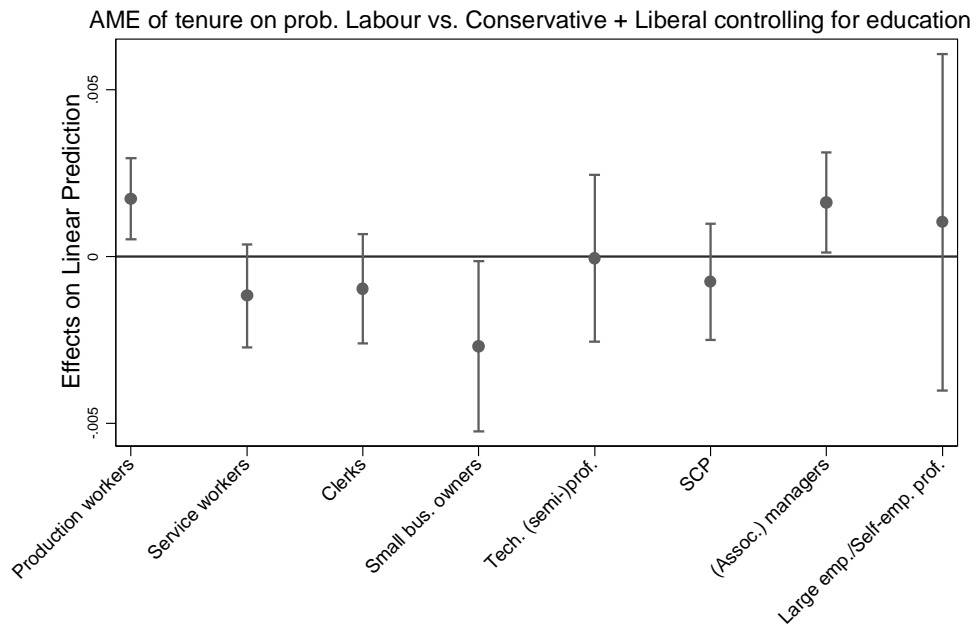
Preferences on economic issues including control for level of education (ISCED as a continuous variable)



Preferences on cultural issues including control for level of education (ISCED as a continuous variable)

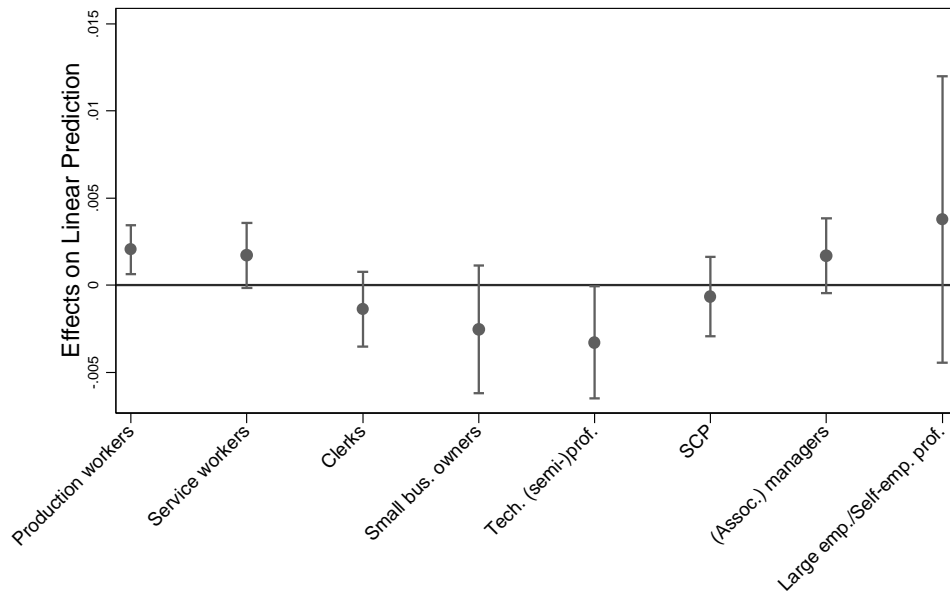


Party preferences including control for level of education (ISCED as a continuous variable)



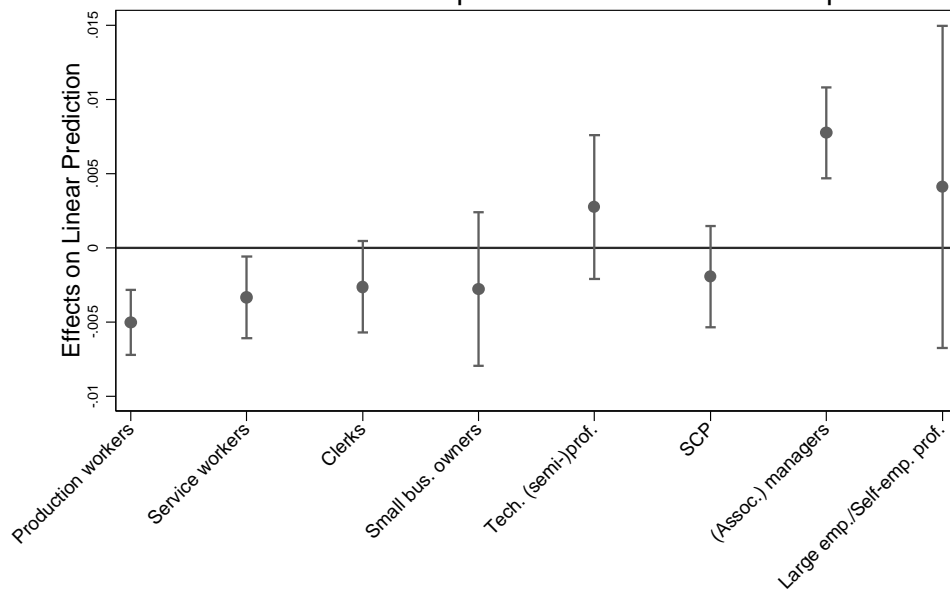


AME of tenure on prob. Labour vs. No preference controlling for education

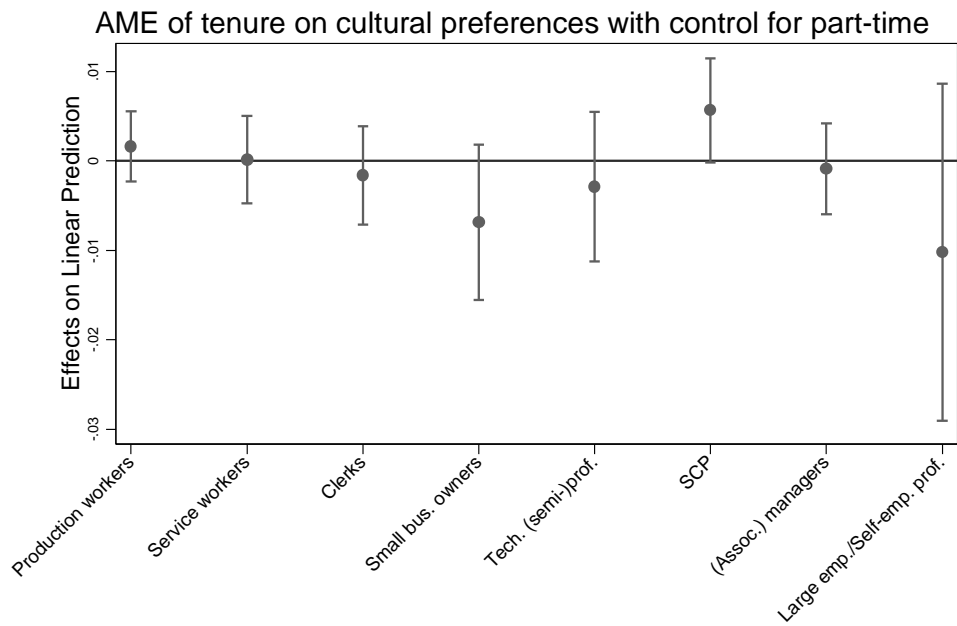


Preferences on economic issues including control for part-time employment

AME of tenure on economic preferences with control for part-time

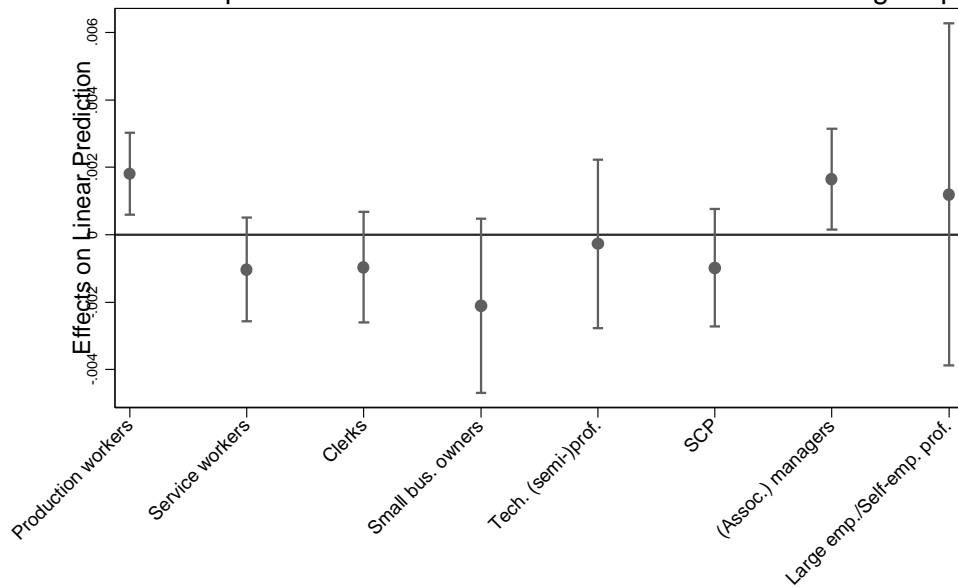


Preferences on cultural issues including control for part-time employment

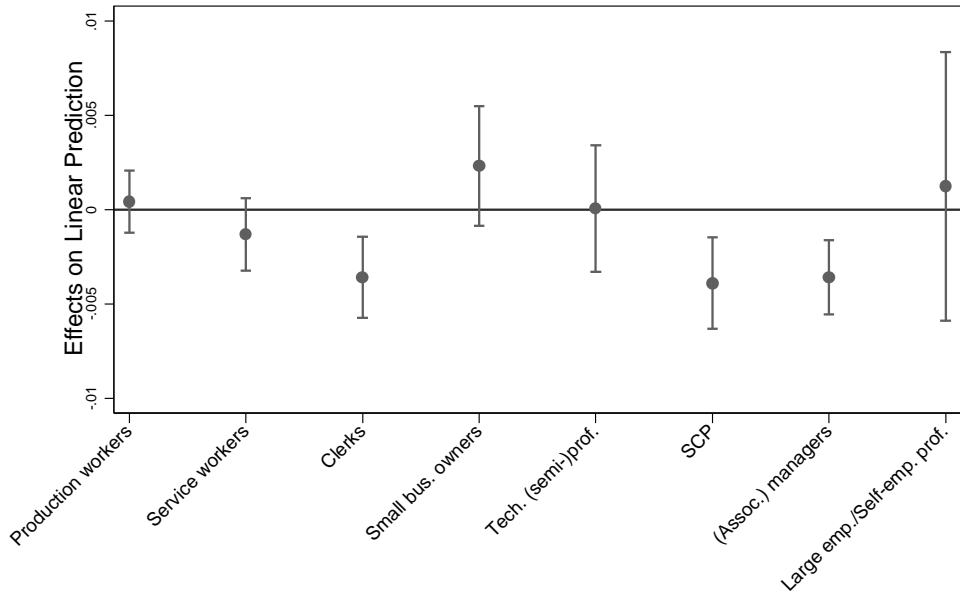


Party preferences including control for part-time employment

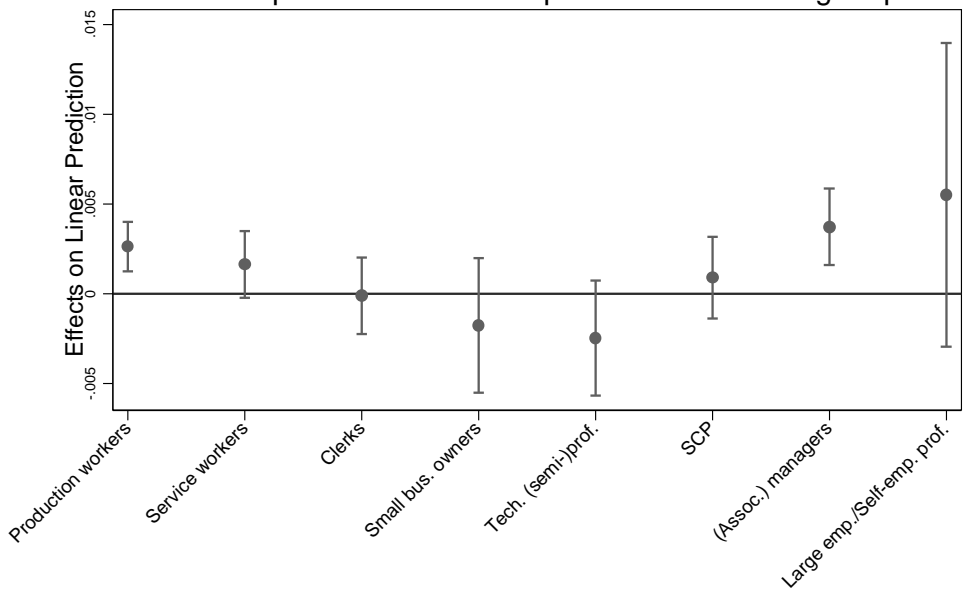
AME of tenure on prob. Labour vs. Conservative + Liberal controlling for part-time



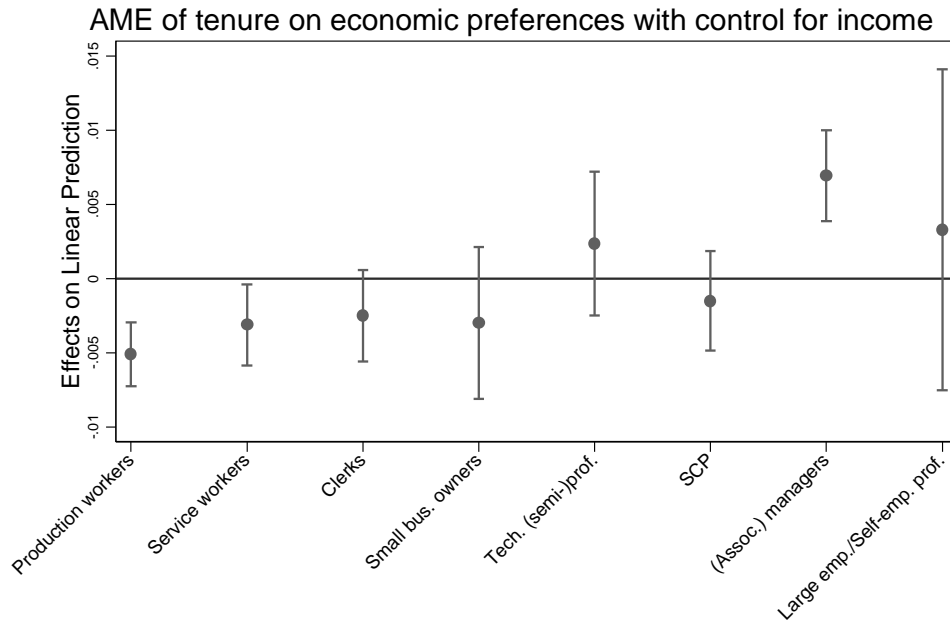
AME of tenure on prob. No preference vs. Conservative + Liberal controlling for part-time



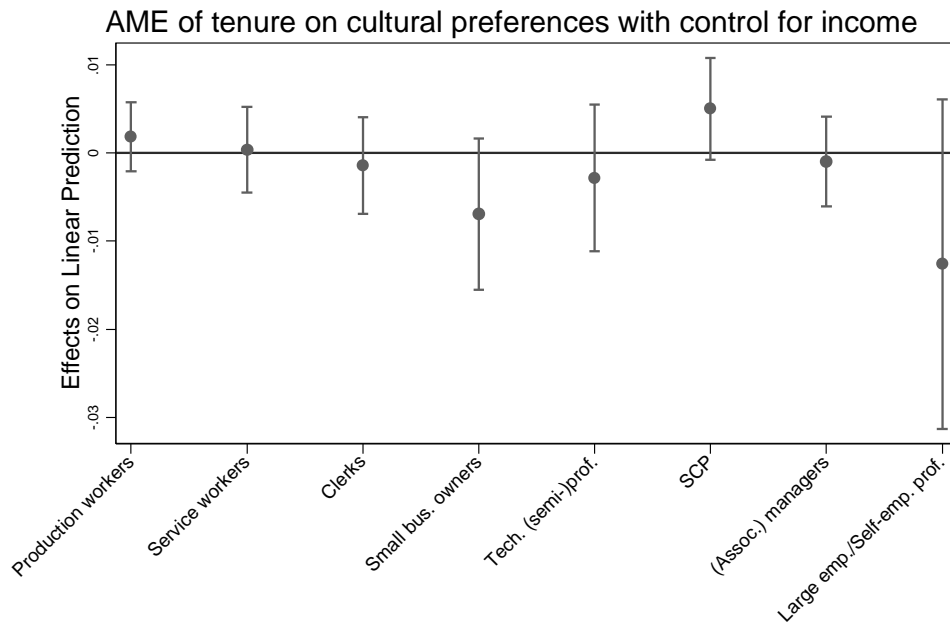
AME of tenure on prob. Labour vs. No preference controlling for part-time



Preferences on economic issues including control for income (total income perceived by the respondent in the month preceding the interview)

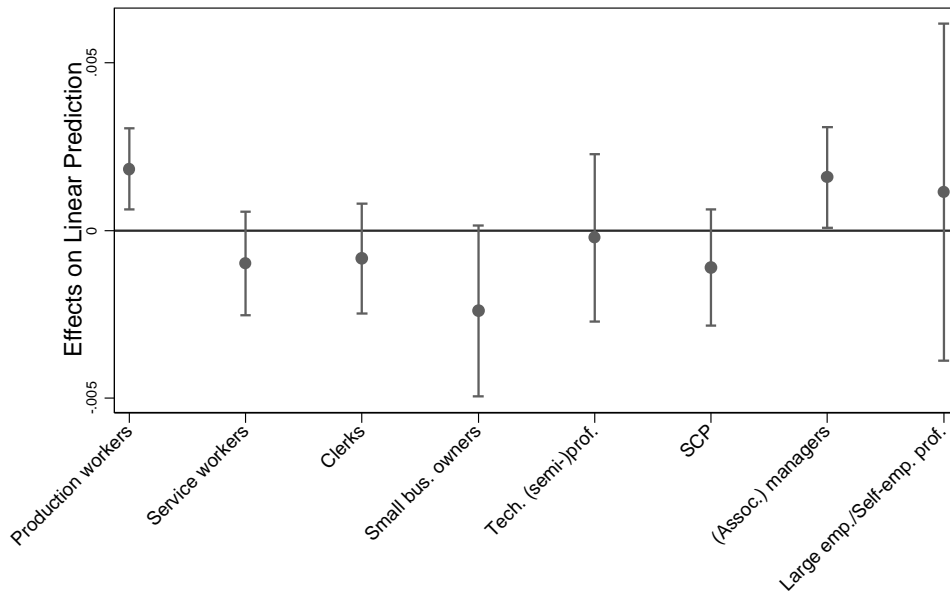


Preferences on cultural issues including control for income (total income perceived by the respondent in the month preceding the interview)

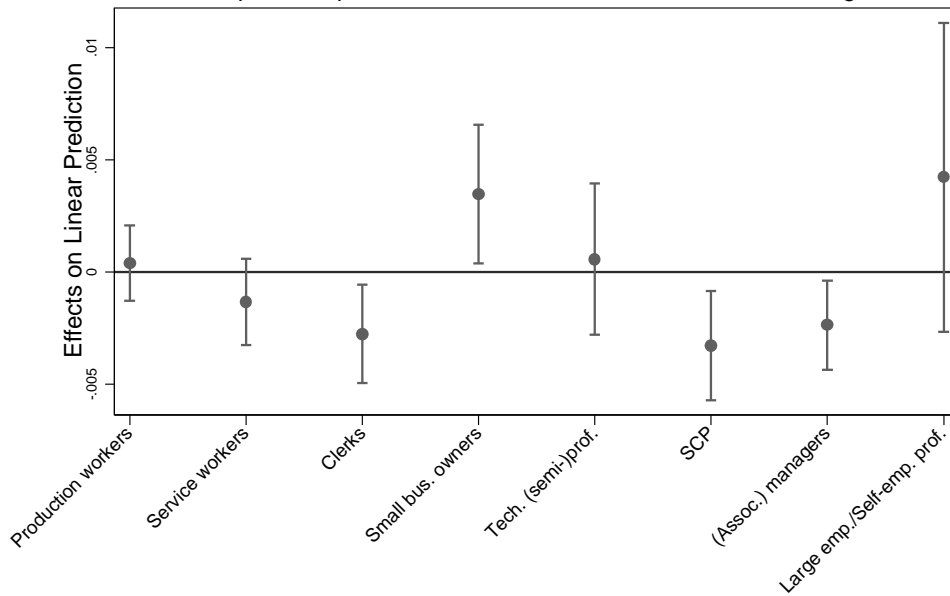


Party preferences including control for income (total income perceived by the respondent in the month preceding the interview)

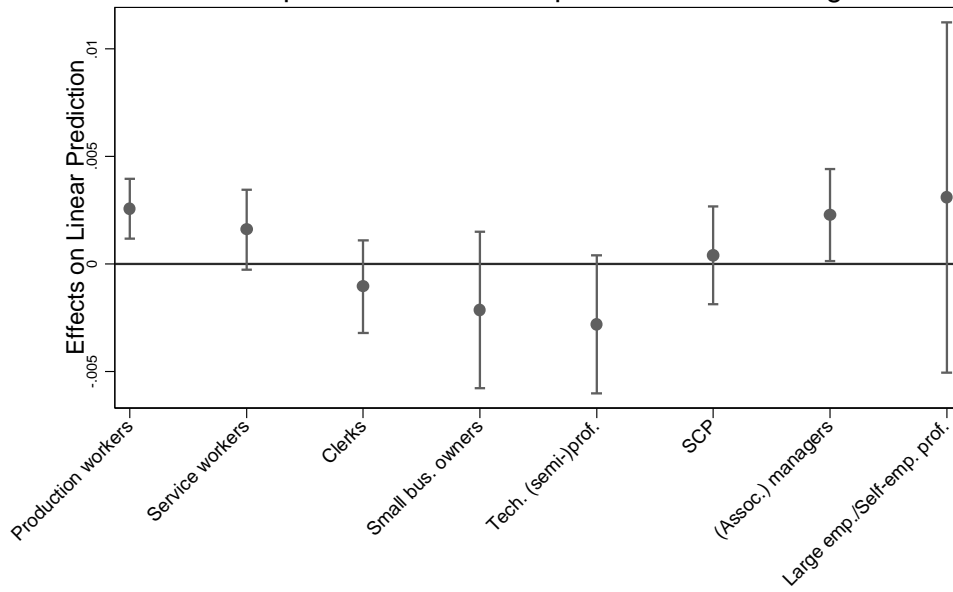
AME of tenure on prob. Labour vs. Conservative + Liberal controlling for income



AME of tenure on prob. No preference vs. Conservative + Liberal controlling for income

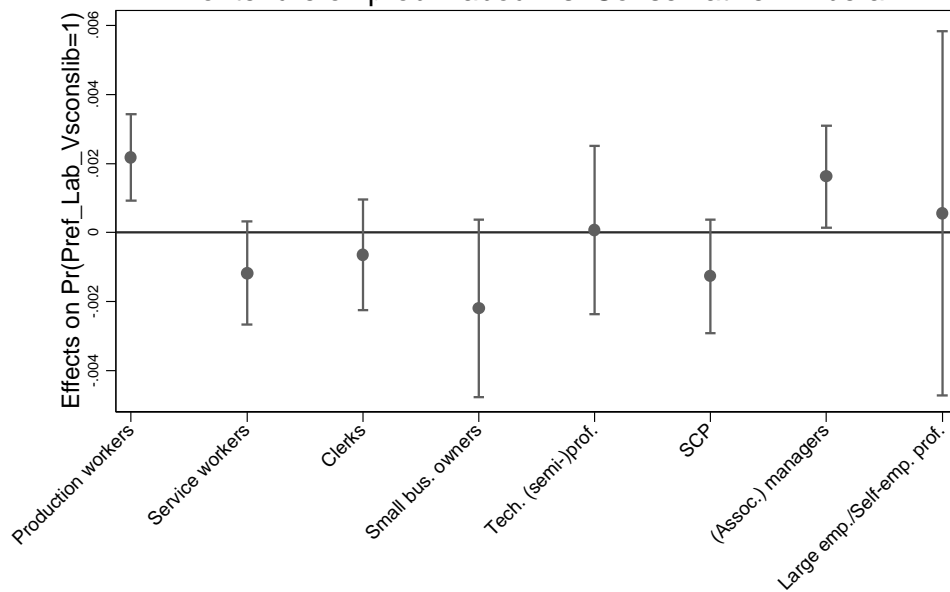


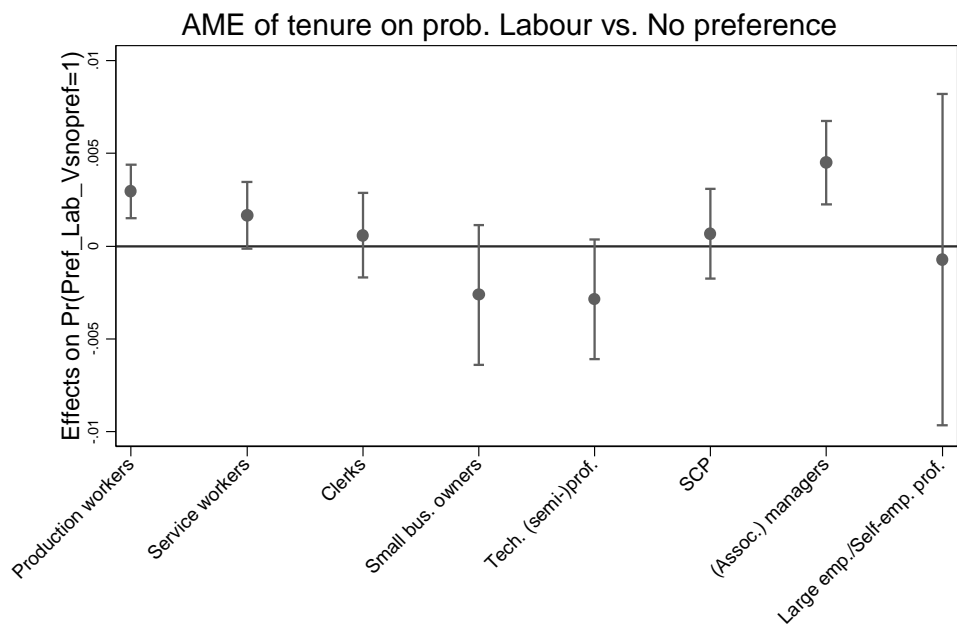
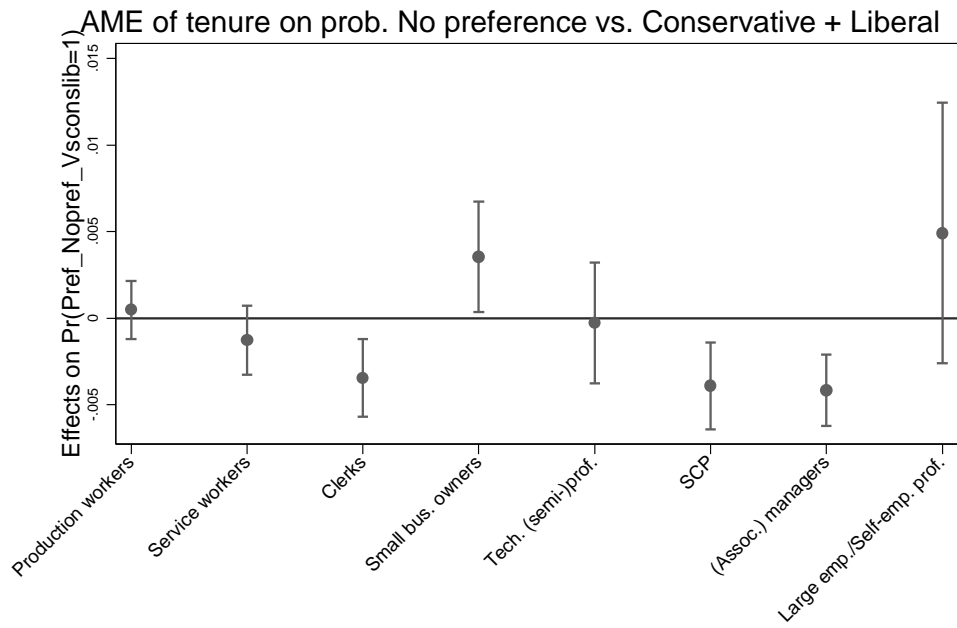
AME of tenure on prob. Labour vs. No preference controlling for income



2. Results from logistic regression models on party preferences

AME of tenure on prob. Labour vs. Conservative + Liberal





## Appendix 6.A: Question wording and descriptive statistics

Variable	Wording	Valid N	Mean	SD	Min	Max
<b>Dependent variables</b>						
Economic preferences	Average score from four different items asked on a Likert scale, inquiring respondents to what extent they agreed or disagreed with the following statements: (i) <i>'Private enterprise is the best way to solve Britain's economic problems'</i> (ii) <i>'Major public services and industries ought to be in state ownership'</i> (iii) <i>'It is the government's responsibility to provide a job for everyone who wants one'</i> (iv) <i>'Strong trade unions are needed to protect the working conditions and wages of employees'</i>	81,980	2.787	0.667	1	5
<b>Independent variables</b>						
Occupational class	Categorical variable measuring occupational classes based on Oesch's class scheme	24,974				
	- Self-employed professionals and large employers	606	0.024			
	- Small business owners	2,379	0.095			
	- (Associate) managers and administrators	4,974	0.199			
	- Office clerks	3,877	0.155			
	- Technical professionals and technicians	1,594	0.064			
	- Production workers	4,538	0.182			
	- Socio-cultural (semi-)professionals	2,654	0.106			
	- Service workers	4,352	0.174			
Vertical class mobility	Class mobility and immobility coded by comparing respondents' class location across different waves of the panel.	24,974				
	- Immobility workers in low- and unskilled classes	13,590	0.544			
	- Upward mobile	1,946	0.078			
	- Downward mobile	1,556	0.062			
	- Immobility employees in professional and semi-professional occupations	7,882	0.316			
Horizontal class mobility	Class mobility and immobility coded by comparing respondents' class location across different waves of the panel.	28,237				
	- Immobility in the technical logic	5,642	0.200			
	- Into the technical logic	1,251	0.044			
	- Immobility in the inter-personal service logic	6,420	0.227			
	- Into the inter-personal service logic	1,499	0.053			
	- Immobility in the organizational logic	7,725	0.274			
	- Into the organizational logic	2,100	0.074			
	- Immobility in the independent logic	2,786	0.099			



Age	- Into the independent logic Age in years	814 86,571	0.029 45.132	18.635	16	65
Gender	Gender of the respondent. Coded 1 = Male	86,572	0.462	0.496	0	1
Region	Categorical variable indicating the region where respondent was living at the time of the survey.	86,053				
	- England	57,744	0.671			
	- Wales	10,396	0.121			
	- Scotland	12,511	0.145			
	- Northern Ireland	5,402	0.063			
Wave	Indicator variable for each of the waves of the panel					

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## Appendix 6.B: Coefficients and standard errors from the models estimated

### Vertical mobility additive models (random and fixed effects)

Variables	M1 Vertical mobility RE	M2 Vertical mobility FE
Vertical mobility (Ref: Immobile Low-skilled)		
Upward mobile	0.099*** (0.012)	0.031* (0.015)
Downward mobile	0.077*** (0.013)	0.005 (0.018)
Immobile Professionals	0.138*** (0.010)	0.007 (0.025)
Horizontal mobility (Ref: Immobile)		
Into technical work logic	0.001 (0.014)	0.001 (0.016)
Into interpersonal service work logic	-0.022+ (0.013)	-0.011 (0.015)
Into organizational work logic	0.011 (0.011)	0.009 (0.014)
Into independent work logic	0.071*** (0.018)	0.065*** (0.019)
Male	0.128*** (0.012)	
Age	0.005*** (0.000)	-0.014 (0.013)
Wave-FE	✓	✓
Region-FE	✓	✓
Constant	2.553*** (0.021)	3.288*** (0.456)
Observations	24,974	26,420
R-squared		0.020
Number of individuals	8,801	9,078

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

**Horizontal mobility additive models (random and fixed-effects models)**

Variables	M3 Horizontal mobility RE	M4 Horizontal mobility FE
Horizontal mobility (Ref: Immobile in technical work logic)		
Into technical	0.087*** (0.016)	0.025 (0.022)
Immobile in service work logic	0.028+ (0.014)	0.046+ (0.026)
Into service work logic	0.064*** (0.016)	0.012 (0.021)
Immobile in organizational work logic	0.165*** (0.013)	0.029 (0.025)
Into organizational work logic	0.114*** (0.014)	0.033+ (0.020)
Immobile in independent work logic	0.223*** (0.017)	0.029 (0.035)
Into independent work logic	0.186*** (0.020)	0.089*** (0.024)
Vertical mobility (Ref: Immobile)		
Upward mobile	0.033** (0.011)	0.029* (0.014)
Downward mobile	0.012 (0.012)	0.002 (0.015)
Male	0.135*** (0.012)	- -
Age	0.005*** (0.000)	-0.014 (0.013)
Wave-FE	✓	✓
Region-FE	✓	✓
Constant	2.522*** (0.023)	3.279*** (0.456)
Observations	24,974	26,420
R-squared		0.020
Number of individuals	8,801	9,078

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

**Interactive models for vertical and horizontal mobility**

VARIABLES	M5	M6	M7	M8
	Vertical & destination	Vertical & origin	Horizontal & destination	Vertical & origin
Vertical mobility	0.131*** (0.027)	0.184*** (0.023)		
Horizontal mobility			0.105*** (0.019)	0.113*** (0.017)
Occupational class (Ref: Production workers)				
Service workers	0.033* (0.015)	0.046** (0.015)	0.045** (0.017)	0.051** (0.017)
Office clerks	0.081*** (0.015)	0.088*** (0.015)	0.133*** (0.016)	0.139*** (0.016)
Small business owners	0.221*** (0.017)	0.193*** (0.017)	0.256*** (0.019)	0.247*** (0.019)
Technical (semi-)professionals	0.176*** (0.020)	0.204*** (0.020)	0.138*** (0.020)	0.132*** (0.021)
Socio-cultural (semi-)professionals	0.098*** (0.019)	0.093*** (0.019)	0.081*** (0.019)	0.067*** (0.020)
(Associate) managers	0.264*** (0.015)	0.263*** (0.015)	0.261*** (0.015)	0.258*** (0.016)
Large employers & Self-employed professionals	0.287*** (0.030)	0.262*** (0.031)	0.300*** (0.032)	0.273*** (0.032)
Interactive terms (Vertical*class)				
Vertical*Service workers	-0.076* (0.037)	-0.106*** (0.032)		
Vertical*Office clerks	-0.052 (0.033)	-0.101*** (0.030)		
Vertical*Small business owners	-0.083* (0.039)	-0.102** (0.039)		
Vertical*Technical (semi-)professionals	-0.185*** (0.039)	-0.241*** (0.038)		
Vertical*Socio-cultural (semi-)professionals	-0.112** (0.039)	-0.196*** (0.039)		
Vertical*(Associate) managers	-0.203*** (0.031)	-0.269*** (0.029)		
Vertical*Large employers & Self-employed	-0.142* (0.058)	-0.228*** (0.057)		
Interactive terms (Horizontal*class)				
Horizontal*Service workers			-0.080** (0.026)	-0.047+ (0.025)
Horizontal*Office clerks			-0.151*** (0.027)	-0.146*** (0.026)
Horizontal*Small business owners			-0.139*** (0.030)	-0.193*** (0.030)
Horizontal*Technical (semi-)professionals			-0.067* (0.033)	-0.018 (0.030)
Horizontal*Socio-cultural (semi-			-0.027 (0.032)	-0.047 (0.030)
Horizontal*(Associate) managers			-0.153*** (0.025)	-0.177*** (0.024)
Horizontal*Large employers & Self-employed professionals			-0.143** (0.049)	-0.207*** (0.055)
Age	0.004*** (0.000)	0.004*** (0.000)	0.004*** (0.000)	0.004*** (0.000)
Male	0.115*** (0.012)	0.118*** (0.012)	0.121*** (0.012)	0.124*** (0.012)

(Continues on the next page)

Wave-FE	✓	✓	✓	✓
Region-FE	✓	✓	✓	✓
Constant	2.518*** (0.023)	2.516*** (0.023)	2.503*** (0.023)	2.507*** (0.023)
Observations	24,974	24,974	24,974	24,974
Number of individuals	8,801	8,801	8,801	8,801

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10