Social divisions defining voting behavior: impact of cleavages on party choice

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Abstract

It is often suggested that various social or value attributes of voters provide them with important cues that divide voters in their political preferences and thus determine their party choice. This mechanism can be referred to as cleavage voting and this thesis aimed to examine which of the investigated five cleavages and respective divides that define them are most relevant in explaining party choice. A number of different multinomial logistic regression models were tested for this purpose on recent World Values Survey data. While empirical analysis left some uncertainties, economic cleavage was found to be mostly expressed by attributes such as social class and occupation, while in case of religious and residential cleavages, religious denomination and geographical location respectively appeared to characterize these cleavages. In contrast to some previous works, class and religion were not found to be the most appropriate predictors of party choice. Instead, residential and with some limitations economic cleavages emerged as most important in this regard, with religious and national cleavages as the second group of most relevant explanations for party choice. Whereas the relative insignificance of value dispositions was not unexpected, the prominence of residential cleavage allows to assume that geographical location encompasses various important motives for party choice. Although residential cleavage appeared to be significant everywhere, cleavage voting is not a uniform phenomenon in all new democracies as theory might suggest. With economic cleavage dominating in South America, cleavage voting there is still to some extent lower than elsewhere, while in case of post-socialist countries it is on the contrary higher with national cleavage being a more relevant factor in party choice. In highly industrialized countries, theories of modernization seem to hold: in such contexts value cleavage is substantially more important while religion less relevant in party choice in comparison to less industrialized countries.
Introduction

The question of why voters vote the way they do has puzzled political scientists almost since the beginning of political studies. Voting behavior is perhaps one of the most studied areas of the discipline and it should not be too difficult to understand why. In a democratic political system voting may be considered as one of the most relevant processes in the context of the systems theory, where the demands of voters can be perceived as the inputs and their choices as outputs of the political process. Moreover, this also means that voting creates a crucial link between individual voters and the broader political arena. This relationship is clearly mediated by voting and behavior of voters. As follows, the process of voting as well as behavior of voters to a large extent determine the nature and functioning of a political system, which is also true for different phenomena affecting voting behavior. In this respect, this thesis examines the effect that divisions in society have on party choice of voters and it seeks to reveal which divisions are most relevant regarding voting behavior.

The exact causal relationship is however more questionable and complex than might seem at first. To begin with, an uncertainty lies even in the direction of the causality since it is not clear whether political outcomes are determined by the choices of voters or is it the party system that shapes the preferences of voters (Colomer and Puglisi 2005, 502–3). The ambiguity furthermore concerns the assumed independent variable in this relationship, i.e. voting behavior that can itself be reliant on different variables. Several theories have been established to describe the mechanisms that influence behavior of voters. Perhaps the simplest model emphasizes the material interests of voters (Manza, Hout, and Brooks 1995, 140) and refers to economic voting (Roper and Fesnic 2003, 119). Accordingly, voters are determined to support parties that most likely represent their own narrow economic interests. Simply put, voters with lower incomes choose parties that are keener on redistribution, while those with high income support parties that would allow them to maintain their material advantages. This coincides well with economic or instrumental theory of political behavior where the choices made by voters are rational, entirely self-interested and driven by mere utility (Nieuwbeerta, de Graaf, and Ultee 2000, 329). On the other end of the spectrum are theories that consider voting behavior as an
extremely stable phenomenon and give priority to historical experiences of social groups and networks (Manza, Hout, and Brooks 1995, 140). In this case the patterns of voting behavior are determined by the organization of society and rooted in its formation. It is thus not only historical legacy but also culture that shape voters’ perceptions (Roper and Fesnic 2003, 129). The midpoint of these two extremes is occupied by approaches that consider social structure as the point of departure in voting behavior. This line of reasoning suggests that the main determinant of partisanship is indeed the position of voters in society and their social attributes, but at the ballot boxes voters also follow their own interests that are inferred from these attributes.

This theory is perhaps best captured by the Michigan School and their respective model according to which social structural variables are at the beginning of the causal relationship and have a strong impact on the social-psychological attributes that eventually predict vote choice (Manza, Hout, and Brooks 1995, 140). At the core of the Michigan model is party identification. Although this can be defined simply as “the sense of personal attachment which the individual feels towards the party of his choice”, such party affiliation is assumed to originate from family, socialization and norms (Thomassen and Rosema 2009, 43). The Michigan Model is however not the only explanation of how different phenomena have an effect on voting behavior and this causality has also been described by various other very similar models. Raymond (2011), for instance, has adapted the original Michigan Model to demonstrate how social cleavages influence vote choice in case of religious voting in particular. In addition to the simple link between the two variables, he also considered the intervening effects of left-right self-placement, party leader preference and economic evaluation. An analogous approach has been taken by Knutsen and Scarbrough (1995, 499–500) who in their conflict model of party choice distinguish between three types of voting. Structural voting would indicate that voters acquire their preferences from structural variables such as social class or religious denomination, while value voting describes vote choice as originating from value orientations of voters. On these terms, cleavage voting would occur when it is assumed that the value orientations which immediately shape the vote choice are themselves derived from structural variables shared within different social groups. In an attempt to capture the distinct understandings of the mechanism behind voting behavior, Thomassen
(2005, 8) in his conceptual framework has neglected the direct relationship between structure and vote choice and instead explained the latter entirely through cumulative effect of different variables. According to this framework, it is possible to differentiate long-term dispositions from short-term tendencies that influence voting, referring respectively to party identification and value and ideological orientations on the one hand, and issues, retrospective judgments and political leaders on the other.

What this multitude of approaches to voting behavior implies is that the motivations and exact causation behind vote choice are both relatively complex and unclear. Yet, all the interpretations described here seem to suggest that the most basic source of vote choice is social structure in one way or another. Voters’ location in social, economic and cultural realms determine the ways in which they perceive political competition and evaluate political parties, despite that this relationship might be weak and mediated by other, perhaps even more influential factors in terms of vote choice. These structural attributes that have the potential to shape voting behavior in direct or more ambiguous ways are often referred to as cleavages, thus cleavage voting describes the condition of structural variables having an effect on the outcome of voting. Of course, this is only a very loose and brief definition that summarizes the conception and it will be further elaborated in more detail. The idea itself, however, has been comprehensively theoretically examined as well as empirically analyzed and there is an extensive amount of literature available on cleavage voting.

Contemporary interest in cleavage voting has its origins in early theoretical works on class struggles and conflict which dates back to more than a century, although the basis for current research was established in the postwar era (G. Evans 2000, 403–4). Whereas most of the early work took the existence of social cleavages and their impact on voting behavior for granted, much of the research on cleavage voting from the past decades has been more often than not involved with settling the argument of whether cleavage voting is in decline or not. Consequently, most of the inquiries into this question have been longitudinal and almost exclusively aimed their attention on the party systems in established Western democracies and examined only a few cleavages. Although there are also a handful of studies that have covered a larger number of countries, for the most part
studies on cleavage voting have concentrated on only several countries or a single country at a time and these tend to be the same cases throughout the literature considered here\(^1\). Thus, the research on cleavage voting has thus far been rather limited in its contextual scope, but also in terms of cleavages included.

In this respect this thesis aims to differ from most previous works. Instead of evaluating and comparing the significance of one cleavage during different time periods in a few countries, an attempt is made here to assess the strength of a number of cleavages in a wide range of countries. The main question that this thesis seeks to answer is which divisions in society have the highest impact on party choice. Since cleavages are here defined as multifaceted phenomena, not only cleavages as such, but also the divisions that constitute these cleavages are compared. In addition, some differences between world’s regions for which previous research and literature gives reason to assume irregular voting patterns are also examined. The thesis is structured as follows. First section gives an overview of various arguments and theories according to which there are grounds to believe that different divisions between voters result in different party preferences. Second section outlines these divisions in more detail and suggests a number of assumptions concerning the strength of this relationship between divisions and party choice. Because evaluating this association is rather complex, third section is dedicated to the methods and particularities of measuring cleavage voting. Fourth and last section presents the results of empirical analysis carried out in order to answer the research question.

\(^{1}\) This includes a number of multi-country studies (Andersen and Heath 2003; Best 2011; Brooks, Nieuwbeerta, and Manza 2006; Dalton 1996; Elff 2007, 2009; Knutsen and Scarbrough 1995; Kriesi 1998; Lane and Ersson 1997; Lijphart 1979; Nieuwbeerta, de Graaf, and Ultee 2000; Nieuwbeerta 1996; Oesch 2008; Oskarson 2005; Raymond 2011; Roper and Fesnic 2003) as well as studies examining single countries (Andersen and Yaish 2003; Bornschier 2009; Brooks and Manza 1997; van der Brug 2010; Gidengil 1989; Graaf, Heath, and Need 2001; Heath et al. 2011; Jansen, De Graaf, and Need 2011; Johnston 1985; Manza, Hout, and Brooks 1995). Of all these only four studies include in their analysis countries outside Northern America and Western Europe (Dalton 1996; Lane and Ersson 1997; Lijphart 1979; Roper and Fesnic 2003).
1. Cleavages in voting behavior

1.1. Definition of cleavages

While the idea of a cleavages in voting behavior is more or less straightforward and there is a relative consensus concerning the exact social attributes that define a cleavage, several contrasting approaches to defining the concept can be found. Some definitions highlight the cohesion of the groups that together constitute a cleavage. Different social categories function as bases for group identification and thus create loyalty to voter’s own social group (van der Brug 2010). By this understanding, cleavage voting requires that voters acknowledge their belonging to a certain group and cast their vote accordingly. In line with this view is somewhat more extreme perception of cleavages that calls for a political competition among different groups of the same cleavage. For instance, Bornshier (2009, 2) sees the intuitive meaning of a cleavage as “a deep lasting division” that is based on a conflict between groups. In any case, by this understanding structural difference alone does not create a politically relevant cleavage.

This approach has also been taken by several authors that have attempted to specify conditions for a social division to be recognized as a cleavage. As first argued by early postwar sociologists, Andersen and Heath (2003) suggest that persistent group voting requires social differentiation and that this differentiation was generationally transmittable, but also necessary is physical and social proximity of groups concerned. Recent views are however more relevant to cleavage voting. According to Kriesi (1998, 167), in addition to structural distinction, cleavage involves consciousness of the groups involved as well as an expression of a cleavage in organizational terms. Similarly, Bornshier (2009, 2) speaks of a social-structural element, collective identity and organizational manifestation of a cleavage. Almost identical to the latter two approaches are the conditions specified by Knutsen and Scarbrough (1995, 494) who also refer to a persistent social division and its organizational form but instead of a shared identity, emphasize common values. Thus, in addition to structural distinction and recognition of a cleavage by those who constitute it, some authors argue that a political cleavage also requires an organizational expression, whether as a political party or some other kind of collective action.
Other definitions of cleavage disregard such rigid conditions and represent more relative approach to the concept. Perhaps the most elementary description falling into this category perceives social cleavages simply as “political differences grounded in the social structure of a society” (Brooks, Nieuwbeerta, and Manza 2006, 91). As suggested by the authors of this definition earlier (Brooks and Manza 1997, 938), what constitutes a cleavage are the “differences in political alignment” among social groups. Only prerequisite for a cleavage is then that social structure creates a political difference of some kind. Whether or not the members of those groups acknowledge their distinction from another group becomes irrelevant. This stance has also been taken by Elff (Elff 2007) who argues that social cleavages can also exist without group loyalties and that a necessary condition for their existence is that the differences between groups simply become politically relevant.

I also suggest that in order for social cleavages to be relevant in voting behavior they do not require an antecedent identification or organization. Any difference in social structure that has the potential to impact vote choice can be identified as a cleavage as long as it allows to contrast social groups in terms of their voting behavior. However, this notion does not necessarily need to be limited to social differences. I argue that any characteristic differentiating voters in voting behavior to the extent that it leads to significantly different political outcomes can be regarded as a cleavage. This concerns particularly variation in different perceptions of voters, for instance an often noted value cleavage. Cleavage is therefore here defined as any theoretically valid distinction between voters that differentiates them in their party choice and that has a theoretical basis for this effect.

1.2. Theory of frozen party systems

The origins of cleavage voting can be dated back to the 19th century when the widespread interest in class theory prompted various scholars to examine the link between class and voting (G. Evans 2000, 403; Manza, Hout, and Brooks 1995, 139). It was not until the seminal study by Lipset and Rokkan (1967) however that the foundations for studies of

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cleavage voting were laid. In their largely theoretical but nevertheless very influential work the authors argued that “the party systems of the 1960’s reflect, with few but significant exceptions, the cleavage structures of the 1920’s” (Lipset and Rokkan 1967, 50) and thus claimed that party systems tend to freeze according to cleavages in social structure at a certain point in time. In case of Western Europe this came about in the 1920’s, but it’s important to note that it was not necessarily so for other parts of the world. Still, whenever the freezing of party systems took place, it resulted in relatively stable patterns of voting behavior within different groups of society. This process may be seen as a freezing of traditional social divisions in political terms (Kriesi 1998, 165) and as such the cleavage structures provided a basis for an expression of a group-based political conflict (Brooks, Nieuwbeerta, and Manza 2006, 89). Whether or not the consequent party systems were rooted in a social conflict is a matter of conceptualizing cleavages, but the hypothesis of frozen party systems nonetheless established a link between social structure and party systems through ballot box.

The translation of social differences (or conflicts according to Lipset and Rokkan) into political cleavages was the result of two historical revolutions that in Western Europe occurred around the previous turn of the century, namely national and industrial (Lipset and Rokkan 1967, 13–23). The national revolution gave grounds for a conflict between the nation-building central culture and opposing periphery, while the outcome of industrial revolution was a confrontation based on economy and class. Because cleavages were the consequence of interactions between these two “fundamental processes of change”, the exact progression of and interplay between these revolutions can explain much of the variance among emerging party systems (Lipset and Rokkan 1967, 34–35). Yet, everywhere can they lead to four distinct cleavages founded on linguistic, religious, industrial or economic conflicts between center and periphery, state and church, land and industry, owner and worker (Lipset and Rokkan 1967, 47). Dalton (1996, 321) distinguishes between two reasons why these cleavages were relevant and powerful at their appearance. First, cleavages created an institutional foundation for party competition, providing not only parties with a base of support, but also voters belonging to cleavages with political representation and electoral cues. Second, they represented the deep ideological divides of class conflict and religious conflicts between Protestants and
Catholics or between secular and religious. However, as such cleavages are inherently dichotomous. While this might be true for political parties that usually tend to have a single appeal, individual voters and their positions in social groups are not as distinguishable and allow for much less arrangement by dichotomies (Elff 2007). This perception of cleavages can thus be considered excessively simplified, especially in the context of more modern social structure.

Along these lines, the freezing hypothesis might appear overall too straightforward to precisely describe the emergence and functioning of party systems. At first sight Lipset and Rokkan seem to suggest that party politics is entirely dependent on social structure and that cleavages alone and directly determine what kind of parties surface and how they interact with each other. Examining volatility, Lane and Ersson (1997, 181) suggest that the model of frozen party systems is rather weak since cleavages are given too much credibility. Even in a situation where all voters alter their party preferences or every party changes its political orientation, the party system in general would still remain frozen as long as it is based on the same cleavages. While it is true that Lipset and Rokkan tended to explain variation among party systems almost exclusively in terms of cleavages, their perception of how social structure was translated into political contestation was more complicated than that. In fact, the freezing hypothesis also takes into account mechanical as well as other institutional effects. For instance, electoral thresholds influence how difficult it is for emerging parties representing certain cleavages to come forth, but perhaps even more importantly, transforming cleavages into party systems depended highly on “the costs and the payoffs of mergers, alliances and coalitions” (Lipset and Rokkan 1967, 32), i.e. party competition. Thus, the way social structure affects party systems is not straightforward but conditioned by institutional and possibly even cultural context.

The freezing hypothesis is not merely an explanation of how cleavages shape voting and how the causality between social cleavages and politics is structured, but it also provides several implications for party politics and voting behavior. For parties, the freezing hypothesis suggests that after party systems have undergone initial configurations and effectively mobilized their electorate, there is very little room for new movements (Lipset
and Rokkan 1967, 51). The first elections in newly established democracies define party systems according to social structure and these two will continue to be mutually reinforcing. This is a pessimistic view of parties that are not able to adjust themselves according to changes in cleavages (Elff 2007), but voters are also expected to conform to the behavior of their group and thus maintain their alignments regarding party preferences. Moreover, the idea of group voting as a consensus on political attitudes among group members allows making various inferences about political system. For instance, cleavages express the most relevant lines of conflict in societies, but it also explains the mechanism through which such oppositions are translated into political representation. As such, the freezing hypothesis makes a strong case for the importance of cleavages and their impact on voting behavior.

1.3. Origin of cleavages. Social structure or party system?

According to the freezing hypothesis, similar political attitudes and party support should develop in societies that are similar in terms of social structure. Empirical evidence has not found this to be true, however (Andersen and Heath 2003, 303). The cross-national variation in the relationship between even the most universal cleavages and voting behavior suggests that other factors besides social structure are in play. This is expected, since there are contextual features independent of cleavage positions that also provide voters with important cues (Best 2011, 279–80). These can be various actions taken by parties, such as party agendas and promotion. What this signifies is that the political manifestations of social divisions result not simply from social structure, but rather from the “interplay between social and political forces” (Jansen, De Graaf, and Need 2011, 510). This is very similar to the aforementioned view of how cleavages surfaced as described by Lipset and Rokkan.

The understanding that there are two aspects to the development of the nature as well as functioning of social cleavages in voting is not uncommon. Andersen and Yaish (2003, 399–400) discriminate between sociological and institutionalist approach to political outcomes, in which case the role of social structure is opposed to the importance of electoral systems. From voters’ point of view, this approach is almost compatible with contrasting expressive theories and instrumental understanding of political behavior.
(Nieuwbeerta, de Graaf, and Ultee 2000, 329). Whereas in the first case voters act according to their group identity and norms, instrumental theory assumes that voters are primarily rational actors in the context of political institutions. Alternatively, when parties are taken as a point of departure in defining political outcomes, they can act as dependent variables determined by social cleavages or on the contrary, as independent actors that decide over relevant cleavages (Colomer and Puglisi 2005, 502–3). These contrasting approaches highlight the critical importance of causality in the concept of cleavages. There is always a demand and a supply side to the relationship between social structure and party system. Voters in need of cues demand the identification of social categories which are supplied by political parties that provide voters with representation (van der Brug 2010, 588). More in line with social cleavage theory is the distinction between strong and weak interpretations of cleavages developed by Zielinski’s (2002, 187–8). According to this, cleavages may be purely the result of historical conflicts, but the eventual cleavage system might also be determined by how political forces shape these conflicts.

However, the simplest way to perceive this dual origin of cleavages is to comprehend it as contrast between top-down and bottom-up relationships. This approach has usually been taken to describe various factors behind the often supposed decline of cleavages in voting3, since it allows to examine whether the strength of cleavages tends to vary with changes in party systems or social structure. According to the bottom-up understanding, the attitudes and attributes of electorate at the bottom have an upwards effect that determines which parties and thus cleavages are significant. Top-down approach assumes that parties and elites at the top have a downwards influence on electorate and salience of cleavages depends on this supply side (Bellucci and Heath 2012, 108). As such, this directional interpretation accurately describes the independent variables affecting cleavages.

1.3.1. Top-down approach

One of the most basic conditions for the emergence of a social cleavage is that voters with particular characteristics persistently support certain parties. A cleavage in voting behavior cannot therefore develop unless there are parties that represent the respective divisions of a cleavage. Unless the concerns of a social group are not represented by a party, voters belonging to those groups are constrained to voting on the basis of other issues (Andersen and Heath 2003, 304), leaving the cleavage representing their initial concern undeveloped. Furthermore, unless there is a political party to represent a certain cleavage, the group solidarity may in the long run disappear (Graaf, Heath, and Need 2001, 3) and so eliminate the possibility of a cleavage emerging in the future. Thus, for cleavages to be vital, they need to be embodied in party systems, not the other way around.

However, parties are not only crucial for representing cleavages, but through that representation they also shape the mechanisms according to which social divisions become political. This is probably what Lipset and Rokkan (1967, 26) had in mind when they claimed that “there are considerations of organizational and electoral strategy” in the translation of cleavages into party oppositions. This does not only occur through the formation of alliances and oppositions between parties as Lipset and Rokkan often seem to have suggested. Parties also have the capability to decide which issues are given credibility, how are they politicized and how are different groups addressed in doing this. After all, when seeking to establish a base of support, parties one-sidedly identify the major social divisions (Johnston 1985, 252) which introduces a critical bias to the sometimes assumed direct translation of social conflict to political oppositions. By crystallizing conflicts and forcing citizens to ally and align accordingly (Lipset and Rokkan 1967, 5), it can be argued that parties define relevant cleavages in a society.

For instance, Elff (2009) in his cross-national study on the decline of cleavage voting suggests that the phenomenon is better explained by the alternation of parties’ political positions, rather than attributable to changes in social divisions. This finding has been backed by de Graaf et al (2001) in their study of the Netherlands, in which they empirically demonstrated that the primary cause of decline in religiously motivated voting was the unification of three religious parties.
1.3.2. Bottom-up approach

Just as parties are required for cleavages to become politicized, voters are also necessary for this to happen. However, unlike parties, that’s emergence and existence are contingent on many factors (including cleavages and electoral support), social structure is relatively independent or at least resistant to immediate changes that often characterize party systems. The causal relationship between voters and parties is from almost every aspect unilateral: voter’s social status does not usually result from her partisanship (G. Evans 2000, 402), while the success and actions of parties are highly dependent on the choices made by voters and so on their social background. Even when it is assumed that parties define relevant cleavages, they’re highly dependent on social structure in doing that.

Changes in cleavage structure are therefore unlikely to entirely depend on actions taken by parties. Rather, parties can be merely intervening variables in the relationship in which social structure determines politically relevant cleavages through voters’ behavior. Political relevance of cleavages is however not a prerequisite for cleavage voting or cleavages as such but instead a result of it. Cleavages are initially constructed prior to elections, so it can be argued that they are formed before becoming reflected in party systems. Consequently, if changes in social structure occur, parties are forced to respond to these and conform to any shifting of social bases in order to maintain their political support (Dalton 1996, 331). Cleavages are thus reflections of social structure and the capability of politics to interfere in the process of cleavage formation is limited at best.

What follows from these arguments in favor of top-down as well as bottom-up approaches then is that there is no distinct source from which cleavages originate. Even though the decisions of voters at the ballot box are dependent on their background, their choices are in most cases almost entirely determined and thus limited by parties as illustrated on graph 1. Yet, when causality is taken into account, a sociological explanation becomes substantially more credible. The way in which social divides are translated into cleavages is fairly straightforward, while the influence of politics on cleavages is almost inconceivable due to the multiplicity of unreliable causal links. An attempt to explore the political explanation would then be a difficult and very likely an indecisive undertaking.

Therefore, in this thesis the bottom-up approach is taken as a point of departure and it is
accordingly assumed that cleavages in voting are organized by the social structure. However, it is important to keep in mind that this is not the only theoretical interpretation of cleavages and other possibly relevant variables in this relationship exist.

**Graph 1.** Schematic comparison of top-down and bottom-up approaches.

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1.4. **Decline of social cleavages**

The freezing hypothesis as formulated by Lipset and Rokkan (1967) has frequently been referred to as the basis for an idea of social cleavages, but this has more than often been done with great skepticism. While the idea that social cleavages determine voting behavior might have been convincing at the time it was suggested, it might have lost its relevance due to various social and economic developments. Despite that some prominent research has found that different social cleavages still shape party choice⁵, a number of

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⁵ Most influential studies that have demonstrated the persistence of traditional social cleavages in voting behavior have been conducted by Manza, Hout and Brooks (1995) and Brooks, Nieuwbeerta and Manza (2006) based on cross-country data. In the context of United States similar conclusions have been drawn by
studies have conversely demonstrated trends of a decline. The latter is especially true for early studies on class voting that commonly used simple measurements and illustrated how working class voters increasingly voted for right parties (Lane and Ersson 1997, 189; Manza, Hout, and Brooks 1995, 147). However, unreliable these methods might seem, Nieuwbeerta (1996) in his cross-national study on class cleavage showed that more sophisticated approaches to class voting in fact do not lead to significantly different results. His analysis revealed that in case some countries a decline can be observed, while in others class voting has remained at the same levels. Kriesi (1998), on the contrary, established that although social divides in voting behavior are still apparent, traditional perceptions of class voting have become inapt for describing the phenomenon in post-industrial societies. However, this often noted decline might also be attributed to the weakening of certain parties that have traditionally been related to certain cleavages, as suggested by Best (2011, 297–8). Thus, even among scholars who accept that the traditional explanations of voting behavior have become unreliable, there is no undisputed agreement on the exact mechanisms behind this decline.

A decline is not the only assumption that has been inferred from these tendencies. Examining developments in cleavage voting throughout several decades, some scholars have concluded that cleavage voting displays a “trendless fluctuation” rather than a general decline (Hout, Brooks, and Manza 1995, 822; Knutsen and Scarbrough 1995, 506; Nieuwbeerta 1996, 370). The findings of apparent decline may simply indicate temporary trends that are only part of the larger picture. However, this does not mean that the claims about the possible decline of social cleavages are not credible. On the contrary, the idea that social divisions no longer structure the patterns of voting in post-industrial societies has often been referred to as the “new conventional wisdom” (Dalton 1996, 329; G. Evans 2000, 402; Thomassen 2005, 5). The frozen party systems cannot simply have survived the changes that have taken place in the social structure during the past century.

Although the conclusions provided by empirical evidence have been rather unclear, Hout, Brooks and Manza (1995) and Brooks and Manza (1997). A strong case for the stability of social cleavages has also been made by Elff (Elff 2007, 2009). These have all employed longitudinal survey data.
theoretical investigations have made a convincing case on the decline and exposed various reasons to have confidence in the assumptions according to which social cleavages are indeed becoming less relevant. First set of causes are largely concerned with the aforementioned changes in social structure and this trend is particularly evident in case of more traditional divisions in party choice such as class and religion. Social class that was once a highly rigid institution and in terms of voting behavior a very stable attribute has become much less restricted. Social mobility has led to higher variation in vote choice within classes as a result of voters more regularly relocating themselves in social structure. This is also true for geographic mobility, which further undermines various social cleavages. Although Nieuwbeerta, de Graaf and Ultee (2000) have demonstrated that intergenerational class mobility does not explain variation in levels of class voting among countries, despite that mobile voters tend to express different patterns of voting, it has often been found that socially more mobile voters also hold more intermediate political attitudes in relation to their initial and final class (Manza, Hout, and Brooks 1995, 143–4). Secularization in a similar manner has rendered the religious cleavage irrelevant, since the number of voters claiming a religious affiliation and following religious practice has decreased everywhere (J. A. J. Evans 2004, 56–7). This suggests that both social class as well as religion are not as good predictors of vote choice as they were before these changes in the social structure, since the number of voters aligning strictly along social cleavage lines has decreased. Or, as put by Best (2011), “there are simply too few of them to have the effect on electoral politics that they once had.”

The second kind of causes behind the decrease of social cleavages involve developments that can be referred to as psychological changes, which are further related to two rather distinct approaches. One of these is concerned with the increased material affluence and follows a theory of value change. Increased material well-being distances particularly lower class voters from the political left and left parties from their characteristic appeal, thus weakening class voting but also cleavage politics in general (Best 2011, 283). While economic differences between classes led to common class identity, the growing differences within these classes imply a collapse of previous class structure and decrease of shared interests (Jansen, De Graaf, and Need 2011, 512). As follows, class status or
more broadly economic conditions fail to provide voters with electoral cues. This is not only the case with class voting, but the heterogenization of religious beliefs may follow a similar trend and have an equivalent effect on religious voting. Another line of reasoning emphasizes the changes brought about by the expansion of education and explains decrease of class voting with theory of cognitive mobilization. Better-educated voters are simply more capable of deciding on political matters according to certain issues and based their decisions on rational assessment, and therefore such voters are more independent of different social attributes in their party choice (Manza, Hout, and Brooks 1995, 144). This is perhaps what Lipset and Rokkan (1967, 55) had in mind when they noted “the mounting revolutions of rising expectations” that challenge governing parties. However, rather than simply weakening class or religious voting, proponents of the cognitive mobilization theory suggest that traditional social divisions will be substituted by new cleavages, or perhaps even a cleavage based on education (Bornschier 2009, 7). These new cleavages will supersede voting based on simple social structure, while retaining the logic of cleavage voting.

Although various terms have been used to describe this trend in voting behavior, these could be summarized with the notion of new politics. For most obvious and thoroughly explored cleavages, such as class and religion, this implies a significant transformation of traditional bases of voting. Most notably in case of class cleavage, the conventional division between manual and non-manual workers is being overtaken by new class cleavages. Particularly crucial here is the emergence of a new middle class (Kriesi 1998) or the class of social-cultural specialists (Graaf, Heath, and Need 2001) that has substantially blurred the class lines among the supporters of the left. It is not the class division in strictly economic sense that now differentiates voters at the ballot box, but as Oesch (2008, 349) has demonstrated, class cleavage is still very much relevant in voting when cultural differences are also taken into account. Nevertheless, what this signifies is that new political matters have become to define party choice which is evident when considering the multitude of political issues characterizing contemporary politics. Although less so with the moral issues expressing religious cleavage, the material questions have to some extent witnessed a decline in political competition while their place has been taken by issues such as environmental protection, quality of life or the
rights of women (Dalton 1996, 332). As demonstrated by van de Brug (2010), older generations are more likely to vote according to their position in social structure, whereas younger generations have a tendency to vote ideologically. Consequently, a generational replacement incessantly contributes to the decline of traditional cleavages. In addition to new political issues, new social divisions that can be based on gender, race or ethnicity, have also appeared and replaced the class-based conflict (G. Evans 2000, 405). As follows, instead of referring to a decline of cleavage voting, it is perhaps more precise to argue that there has been a transformation of traditional bases of cleavage voting. Thus, it can be expected that new social or cultural divisions define political competition.
2. An outline of cleavages

2.1. Cleavages and social divisions

Social structure does not unequivocally reflect all the cleavage arrangements it contains and there are various social divisions that have the capacity to shape voting behavior. Not all divisions in society become cleavages that are relevant in party choice. A brief glance at the literature is enough to demonstrate that research on cleavages in voting preferences has been mainly concerned with just two cleavages. Social class and religion are most important cleavages in Western Europe and have without doubt received most attention which has also been noted by several authors (Best 2011, 282; Graaf, Heath, and Need 2001, 1). Interestingly, these two cleavages coincide well with the framework of Lipset and Rokkan (1967, 10) who differentiated between territorial and functional dimension of cleavage structures. In case of the two dominant cleavages, religion represents the territorial dimension, while class corresponds to the functional opposition. Religion is mostly concerned with locality, whether as a conflict between secular center and religious periphery or between different religious denominations. Social class, in contrast, surpasses both territory and culture and is more involved with interest, hence the functional aspect.

This supports the argument that while territorial cleavages may be more relevant during the national revolution and the process of nation-building, they are overcome by functional conflicts of industrial revolution (Gidengil 1989, 566). Accordingly, social class is a more significant cleavage in developed industrial societies. Its universality in comparison to religion is also suggested by the fact that socialist or social democratic parties are simply more common than parties representing religious sentiment (Oskarson 2005, 87). Conversely, it has also been claimed (G. Evans 2000, 401) but empirically demonstrated as well (Elff 2007; Hien 2013; Lijphart 1979) that religion, rather than social class, might be more consistent and reliable predictor of vote choice.

In any case, these two cleavages seem to be more relevant in terms of voting behavior than any other social division. This is true for at least most of established Western democracies where national and linguistic conflicts have commonly been overcome and
main conflict lines in party politics are often defined by class and religious oppositions. Yet, the importance of these two cleavages is not simply a consequence of revolutions or other historical developments that hold merely an abstract association with contemporary politics. Andersen and Heath (2003, 302) have argued in the context of political cleavages that social and political attitudes in general follow two dimensions: left-right and liberal-conservative dichotomies. While the former is concerned with economy and state intervention in it, the latter is about personal freedoms. I suggest that the reason why class and religious cleavage tend to be so significant in vote choice is that they represent these two main divisions of political conflict. Whereas social class, or more broadly any division in economic sense, is unambiguously a matter of political left-right, religion can be considered to represent the liberal-conservative contradictions, where religious is as a rule associated with higher morality and a lower level of personal freedom. It can thus be assumed that economic and religious cleavages most accurately explain vote choice.

Just as every issue in a political competition does normally not have equal importance, it would be a mistake to assume that all cleavages in any society can be equally relevant in influencing vote choice. As Lipset and Rokkan (1967, 6) have argued, only a few cleavages can polarize a political system and a “hierarchy of cleavage bases” determines the conflict lines in it. One can even go as far as to adopt a “one nation: one cleavage” view (Johnston 1985, 245). Consequently, by this understanding there can be only a single significant cleavage in every country that defines political conflict.

Social class and religion are far from being the only division in social structure that can have a significant effect on voting behavior. Although those two have received undoubtedly most attention, at least in Western democracies social attributes such as gender, age and education have also been found to influence vote choice (Andersen and Heath 2003, 301). There are certainly other social differences as well that have the potential to affect voting. In line with the approach to understanding cleavages taken here, practically any attribute that distinguishes voters and subsequently has an effect on their voting preferences can be considered a cleavage as long that effect is also theoretically valid. This last notion is of critical importance. While the aforementioned gender, age and education might be empirically found to predict vote choice, it is somewhat difficult to
give a reasonable explanation of how these entirely structural attributes alone could change the way voters perceive parties.

In case of gender, women in some countries tend to support left parties, but this is most likely due to the fact that they are more often employed in public sector and more dependent on welfare benefits (Brooks, Nieuwbeerta, and Manza 2006, 93). Although a substantial generational effect on motivations behind vote choice has been found (van der Brug 2010, 602–3), age does not affect vote choice in terms of preferring left to right or vice versa (Andersen and Heath 2003, 316). This suggest that just like education that has an impact, although negligible, on voting through an influence on the attitudes and values of voters (Jansen, De Graaf, and Need 2011, 523), age also shapes voters’ ways of thinking, although younger and older cohorts could also be more prone to vote for left due to economic reasons. Education, and to some extent age, should thus not be treated as cleavages as such, but it would be theoretically more correct to observe values and attitudes that have a more immediate impact on voting behavior. While it can be argued that all cleavages affect vote choice merely by shaping voters’ attitudes, the recently described three attributes have very little direct effect and their influence is more likely motivated by economic incentives. They lack the more functional association with vote choice that can be observed, for instance, in case of social class or religion. Moreover, parties that more or less exclusively represent only certain groups of gender, age or education are rare.

In forthcoming sections, gender, age, nor education are thus considered as cleavages. Instead, five distinctions in case of which there are theoretical motivations to believe that they have a significant potential to directly affect party preferences are examined. These will be introduced in the next section.

2.1. Composition of cleavages

A total of five distinctions that can be observed in social structure and hold a more immediate relationship to vote preferences are regarded as cleavages here. These are economic, religious, residential, national, and value cleavage. While the economic cleavage has generally been referred to as social class cleavage, the latter term has more
than often been used to describe cleavage based on work logic, i.e. the employer-worker cleavage. A number of studies (Jansen, De Graaf, and Need 2011; Manza, Hout, and Brooks 1995; Nieuwbeerta, de Graaf, and Ultee 2000) has also demonstrated that class cleavage is considerably more complicated than a simple distinction between higher and lower social classes. In addition to the four social cleavages, a fifth cleavage is included that captures only the psychological propensities in voting behavior, namely the value cleavage. However, cleavages are not as simple phenomena as that, since there are various ways to define and operationalize each of them. What exactly is it that expresses a cleavage in social structure? For instance, in a given society there may be no variation regarding voting behavior between voters who consider themselves to be religious and those who do not, while religious denomination in the same context can be a significant predictor of vote choice. Such tendencies are perhaps even more relevant in case of economic cleavage. One of the main reasons behind contrasting findings regarding the strength of class cleavage is very likely differences in how class is conceptualized, since categorizations of class can be based on various attributes (Oesch 2008, 330). Consequently, there is a risk of making incorrect assumptions about the relevance on different cleavages. This not simply a matter of measurement, but rather conceptualization. For this reason I distinguish cleavage components to more precisely describe the phenomena different cleavages represent so that each cleavage would encompass all relevant attributes. A description of these follows.

### 2.1.1. Economic cleavage

Class has supposedly been the most common and straightforward phenomenon to describe social cleavages in voting behavior. Here this is referred to as an economic cleavage and is comprised of four components that characterize the economic situation of voters in one way or another.

**Subjective social class.** Class is probably the most basic approach to describing different

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6 Something similar might be the case in Germany, where religious cleavage does not run between traditionalists and modernists, but rather between traditional Catholics and more progressive Protestants (Hien 2013, 455).
economic attributes affecting vote choice. In most cases a distinction based on occupation or income is drawn between working and middle class and any further categories are disregarded (Manza, Hout, and Brooks 1995, 151). Recently, however, more sophisticated class schemes have been adopted that introduce more detailed differentiation between work logic and wealth. Graaf, Heath and Need (2001, 8), for example, distinguished among others between service classes, manual classes as well as routine-non manuals and petty bourgeoisie. This illustrates how indefinite has been the approach to the meaning of class. Does it express the wealth or occupation of a person? I suggest that these two should be considered individual components of economic cleavage and class denotes a component on its own. Usually as an ambiguous concept, class is largely about perceptions. Accordingly, class refers here to subjective perceptions of a person’s socio-economic status. Social class in this sense follows more classical or Weberian interpretation where collective identity and common organization are crucial in defining it (Oesch 2008, 331–2). As such, group loyalties rather than strictly structural attributes is the phenomenon that defines class status. Various class-based organizations are of critical importance in reinforcing class identities and mobilizing their members to support specific parties (J. A. J. Evans 2004, 46). Most notable in this context are labor unions that have a significant part in mobilizing lower class support for the left. Therefore, voters who are considered to belong to lower classes (whether by themselves or others) have historically been related to left, whereas upper classes have more reasons to vote for right parties.

**Occupation.** First studies that examined the link between voters’ economic situation and vote preferences focused exclusively on work logic. Class or economic cleavage was viewed as a simple distinction between voters who were involved with manual work and voters who were engaged in non-manual occupations (Nieuwbeerta 1996, 349–50). As previously mentioned, various more detailed categorizations of classes have been developed, and these are at least partially concerned with occupation. The main innovation that these have introduced is the realization that classes in the sense of occupations cannot be ordered from lowest to highest. Such approach recognizes the more complex relationship between occupation and work that goes beyond economic self-interest. On the one hand, people choose professions that coincide with their personalities
and mindset, but on the other, work logic also cultivates certain traits and attitudes. This is how the twofold causality between occupation and vote choice functions. Correspondingly, Kriesi (1998, 169) has distinguished between sociocultural professionals and managers, assuming that the former vote for left-libertarian parties, while latter support right-authoritarianism largely due to the different characteristic of their work. As several studies have revealed, occupation does not have an effect on voting behavior only through voters’ social class belonging, but also in terms of work logic.

Income. While occupational cleavage is about the source of income, income cleavage is related instead to the amount of income (Manza, Hout, and Brooks 1995, 151). Another way to see this distinction is to follow Oesch (2008, 332–3) who differentiated between economic and cultural cleavage. While both relate to occupation, economic cleavage in Oesch’s terms also concerns the resources that voters possess and their motivation to support state intervention in redistribution. Thus, a distinction between occupation and income is very relevant when it comes to cleavage voting. On the most basic level, social class cleavage (as it has been conventionally understood) is based on the assumption that lower income groups vote for the left while voters economically better off support parties of the right. In this way, the former group backs financially more redistributive policies, while latter opposes them to maintain their advantages (Elff 2009, 297). Thus, from a purely rational perspective, there is reason to believe that the income of voters has a notable impact on their vote choice.

Employment sector. In the context of economic cleavage, the employment in public or private sector may also have a prominent role in voting preferences. This causality may follow two separate logics. First, those employed in public sector are inclined towards parties supporting more state involvement and increase in government employment as well as growth of state in general, whereas voters engaged in private sector should rationally support free enterprise (Brooks, Nieuwbeerta, and Manza 2006, 92; J. A. J. Evans 2004, 58). Public sector workers therefore tend to vote for the left, employees of private firms prefer parties on the right, an assumption that has found some (although limited) empirical support (Kriesi 1998, 170; Oesch 2008, 345). Second, since workers involved in public sector are more immediately dependent on government, there is reason
to believe that they support currently incumbent parties. Especially higher government officials are often appointed by political executives. Either way, public and private sector employment has a potential to predispose voters towards certain parties.

While all the previously described components of economic cleavage function via voters’ economic self-interest, their effect on voting has a different magnitude due to different ways in which these components function. Perhaps the most relevant aspect of this fact concerns the weakening of class component as a predictor of vote choice. Due to changes in class structure and employment, “traditional class voting” (Hout, Brooks, and Manza 1995, 806) that is grounded on simple distinctions between manual and non-manual work, but also working and middle class, has become obsolete as more complicated class as well as occupation schemes have emerged. In contemporary societies, economic cleavage is no longer about lower classes and manual workers voting for left, i.e. wealth and income. For instance, studies by Kriesi (1998), Manza, Hout and Brooks (1995) and Oesch (2008) have all tested class schemes based on work logic and found them better at predicting vote choice than more traditional approaches. At least two developments are behind this new reality. First, a “new” middle class has appeared that is more heterogeneous than the traditional middle class (Bornschier 2009, 7; Kriesi 1998, 168–9). Voters belonging to this more contemporary middle class are not assumed to vote for the right, but also support progressive and libertarian parties. Second, unskilled workers have also become more supportive of the right due to growing affluence (Brooks, Nieuwbeerta, and Manza 2006, 113). As a result, a hierarchical ordering of work logic in relation to voting is no longer relevant. Thus, it can be argued that a more diverse measure of voters’ occupation predicts vote choice more accurately than other components of economic cleavage.

2.1.2. Religious Cleavage

It has become a common knowledge that religion has lost its relevance in contemporary societies, however as noted earlier, it has still been found in some studies to be the best predictor of vote choice. Three understandings of what defines this cleavage are distinguished here.
**Practice of religion.** One explanation of the significance of religion is related to the conflict between secular and religious. As religion has become less relevant, the differences in voting behavior have increased between voters who practice religion and those who do not. This is especially true for religious voters who feel that their religious identity is threatened and find that the process of secularization has advanced too far (Brooks, Nieuwbeerta, and Manza 2006, 92–3). Consequently, voters practicing religion are expected to vote for parties that represent the moral values held by them, whereas common trends should not be prevalent among voters not practicing any religion.

**Subjective religiosity.** Another possible reasoning behind the continued salience of religion is that it represents moral values that can be very relevant regarding numerous prevalent political issues, such as abortion or immigration (van der Brug, Hobolt, and Vreese 2009, 1268). People who perceive themselves as religious have reason to support parties that are more supportive of policies that uphold religious values and traditions, while not necessarily being religious. Although this component is very similar to the previously described one, it functions by an altogether different mechanism, emphasizing religious sentiment of voters, not their actual religiosity. Voters who do not necessarily practice any religion, but support religious values very likely vote for parties representing respective beliefs, while voters distancing themselves from religion can also be expected to oppose any religious sentiment and parties representing these.

**Religious denomination.** Religious cleavage lines do not only run along the secular-religious conflict, but party choice may also differ among voters belonging to different religious subgroups. In case of Christian confessions, studies have come to somewhat contrasting conclusions. While Protestants have been found to be more supportive of right-wing and conservative parties when compared to Catholics (Andersen and Heath 2003, 318), religious denomination has arguably largest impact on vote choice in Catholic as well as in religiously diverse societies (Knutsen and Scarbrough 1995, 503). The likelihood of adherents to these different confessions voting for Christian democratic parties has also revealed varying patterns in different countries (Best 2011, 287). Although it is unclear which denominations are more supportive of religious parties, groups differing along this division can be assumed to develop different voting behavior.
Particularly in countries where opposition between different religions is a major line of conflict are voters expected to express such controversies at the ballot box in search of a political recognition of their own beliefs.

Yet, with the expansion of secularism everywhere there is reason to expect this division between different religious denominations to be substituted with a secular-religious divide. As societies are becoming more secular, oppositions between religious and non-religious voters can be assumed to become more relevant than those among religious voters. Dalton (1996, 327) in his cross-country analysis of cleavages has concluded that the latter split between voters in terms of church attendance has much more influence on party choice in nearly every industrialized democracy. Since I suggest that voting behavior is most immediately influenced by attitudes, I also argue that subjective religiosity has a stronger impact on vote choice. Even though the increased relevance of a secular and religious divide might not be true for more traditional societies, a subjective religiosity should predict vote choice more accurately than other components of religious cleavage.

2.1.3. Residential cleavage

Area in which voters live may have a substantial effect on their voting behavior. Such differences were one of the central conflicts that defined the frozen party systems according to Lipset and Rokkan, who distinguished between economic or class and cultural or national oppositions that were expressed in relation to territory (Lipset and Rokkan 1967, 41). Accordingly, there are two distinct ways to perceive the residential cleavage.

Urbanization. Economic as well as cultural and social differences between urban and rural areas are still relevant, although perhaps not so significant as in the past. Historically, the divide in economic terms is illustrated by the existence of agrarian parties representing rural areas and parties of the left supported by lower class workers. This assumption has also been confirmed by findings that class divide in left vote has been more salient in urban areas (Johnston 1985, 247) where the class conflict is more prominent. Rural regions are commonly more traditional, especially in terms of moral issues, and in this respect they can be opposed to urban areas. It can thus be assumed that rural voters tend
to support right-conservative parties while in urban areas progressive left gains more support.

**Regionalism.** Roughly for the same reasons that countries differ from each other regarding cleavages in voting, territories within a country also can also be expected to vary in party support. Social networks of voters living in the same area blends their attitudes and creates a common identity but historically evolved regional peculiarities are significant as well (J. A. J. Evans 2004, 47). Andersen and Heath (2003) have proposed that regions rather than countries should be used as unit of analysis when examining political cleavages and other studies that have included regions in their inquiry of cleavages have also revealed regional variation in a number of countries (Johnston 1985; Roper and Fesnic 2003). However, it can conversely be argued that regional effects are too often cited when other factors fail to explain variation among regions (Gidengil 1989, 564–5). Nevertheless, due to variation between regions of countries and contrasting political conflicts within them, voters in different regions very likely express different patterns of party choice, which should thus be considered as a separate mechanism of cleavage voting.

As a result of already mentioned changes in class structure and employment but also the blurring of distinctions between the traditional political left and right, the political divisions between urban and rural areas are expected to decrease. Although the very same can be said about regional differences, these are likely to be less affected. Regional splits encompass political oppositions that continue to be relevant, while agrarian as well as traditional left parties that represent the urban versus rural divide have witnessed a decline. Therefore, regional differences are expected to predict vote choice more accurately than urbanization.

### 2.1.4. National cleavage

Territorial oppositions are according to Lipset and Rokkan only one expression of strains created by national revolutions. Perhaps more salient from regional antagonisms in this context are conflicting national identities. The opposition between nation-building central culture and peripheral identities (Lipset and Rokkan 1967, 41) is not only a thing of the past but might as well be still relevant today. Nationality is here considered to be
expressed by two components.

**Ethnicity.** Ethnic origin has a highly significant part in the formation of national identity. It has a high potential to polarize societies since ethnic divisions very often involve not only strong group oppositions but also distinct socio-economic differences (Dalton 1996, 329). Ethnic minorities are often economically disfavored and have been found to be more supportive of left-wing parties (Andersen and Heath 2003, 320; Heath et al. 2011, 265–6). Yet, ethnicity is very likely to influence vote choice without these latter reinforcing differences. The tendency of ethnic minorities to vote for the left may also be interpreted as support for more solidarity and equality between different ethnicities and as such motivated by an attempt to protect their own ethnic identity. The existence and popularity of ethnic and extreme right-wing parties also suggests that voters may regard ethnicity as a point of departure when casting a vote. Ethnic belonging may therefore lead to different patterns of voting.

**Language.** Another attribute that promotes national cleavage is language. Language may be regarded as “one of the principal building blocks of nationalism” (Lijphart 1979, 453), since it creates common networks and distinguishes nations from one another. Even though in many societies language corresponds to ethnicity, this is not necessarily always the case. In similar ways that ethnic groups may seek political representation, speakers of a certain language may also pursue their linguistic or cultural privileges. In his study of four linguistically divided countries, Lijphart (1979) concluded that although language is the strongest predictor of vote only in South Africa, it is still overall more relevant than class. Linguistic differences may thus provide important cues for party choice, even in ethnically homogenous societies.

There is, however, reason to assume that ethnicity entails more significant incentives regarding voting behavior. According to a study by Heath et al. (2011), even voters who

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7 For example, in Canada language has a notable effect on class cleavage as francophone voters show different patterns of voting compared to English-speakers (Gidengil 1989, 585–6), while a common way there to identify oneself is Canadian rather than French or English.
belong to a minority group but have become fluent in a majority language are still more similar to those belonging to the original minority group in terms of turnout. This implies that even when linguistic divide is overcome, ethnic differences nonetheless remain important for national identification. Ethnicity can simply involve a wider range of cultural particularities, whereas language is only a single feature. Thus, it is suggested here that ethnicity predicts vote choice more accurately than language.

2.1.5. Value cleavage

In addition to the four previously described cleavages that are usually perceived to be rooted in social structure, a cleavage that is more immediately linked to attitudes is also considered here. The fact that it is not represented by a single social attribute is one of the reasons why the value cleavage is often not recognized as an actual full-fledged cleavage (Knutsen and Scarbrough 1995, 497; Kriesi 2010, 679). It lacks a clear structural basis that distinguishes voters in their party choice and there is usually no common identification or organization of voters holding common values. However, according to the concept of cleavages employed here, value divide is deemed to constitute a cleavage since it should theoretically be linked to party choice. The mechanism behind the increasing importance of value cleavage is fairly simple. As social cleavages weaken due to social as well as geographical mobility, voters begin to relate to those holding similar attitudes and value orientations rather than receiving their electoral cues from people who they share only their position in the social structure. Interactions with those holding similar values and less contact with people maintaining different values further reinforces the gap in voting behavior based on values. Kriesi (2010) has provided several examples from the literature of different dimensions of value cleavage, such as Green-alternative-libertarian vs traditional-authoritarian-nationalist or libertarian-universalistic vs traditionalist-communitarian. Most parsimonious and universal distinction is however based on two simple elements: post-materialism and libertarianism.

Post-materialism. The post-materialist component of the value cleavage has its roots in the theories of value change and modernization as posited by Inglehart and Welzel (2005), who drew attention to the polarization between materialist and post-materialist values. As a consequence of increased existential security and material well-being in post-industrial
societies, a generational change is now taking place that results in emphasis on self-expression, subjective well-being and quality of life, rather than purely material issues (Inglehart and Welzel 2005, 52–3). New important issues appear on the political arena, such as environmental protection, women’s rights and political participation. This trend entails a significant change especially for the political left that represents post-materialist value orientations on these matters, whereas the party choice of materialists still depends on their economic and social situation (Elff 2007). There is thus reason to believe that post-materialist voters tend to be more supportive of the left that represents post-materialist values.

Libertarianism. Although the libertarian-authoritarian dichotomy can easily be placed on the same scale as the post-material-material divide, it involves a different approach to the value cleavage. The latter can be viewed as a conflict over the role of community that is largely focused on cultural issues and involved with questions of hierarchy and tolerance (Kresil 2010, 680–1). While libertarians favor tolerance, equality and freedom of thought, voters with authoritarian attitudes prefer strict social hierarchy and submission to the dominant norms. Voters holding libertarian values prefer parties representing cultural diversity and individual autonomy, whereas authoritarians tend to support parties endorsing cultural homogeneity and national delineation (Oesch 2008, 333–4). These value orientations rather accurately correspond to the political left and right, which suggests that libertarian voters vote for leftist parties as authoritarian voters support parties of the right.

As such, the libertarianist element is fairly limited as it expresses only one narrow value divide, while the post-materialist division encompasses differentiations based on a number of issues and attitudes. While explicitly highlighting a particular aspect of it, the libertarian-authoritarian divide can be considered as an attribute of post-materialist split, since post-materialist values emphasize tolerance and equality. For this reason the post-materialist element should be better able to predict vote choice.
2.2. Differences in cleavage voting between world’s regions

Party systems have not appeared and developed in a similar way in every political system. Rather, they have emerged under very different conditions and are at least to some extent dependent on the varying composition of social structure. In line with the theoretical literature on social cleavages, not least important is the level of economic as well as social and political development of a country. In terms of such path dependency approach, the timing and degree of democratization and its requirements are also often noted to have a critical part in shaping the nature of cleavage voting\(^8\). In particular, the behavior of new electorates is relevant here. In recently established democracies, voters lack the long-established party attachments that would result in freezing of party systems and group patterns in voting behavior (Dalton 1996, 339). Consequently, cleavage voting should remain weak in new democracies.

Still, it often occurs that newfound democratic regimes have experienced democratic rule during some period in the past. Latin America provides a number of examples of this. Countries such as Columbia, Uruguay and Chile have party systems that have not gone through a significant change since their first encounters with democracy and thus a freezing of party systems can be examined in these cases (Bornschier 2009, 8). However, this does not inevitably imply a high level of cleavage voting as also does not the mere existence of strong social divisions. Despite widespread economic inequality and unionization, class voting in Latin America has found to be relatively weak (Bellucci and Heath 2012, 111). Moreover, class-based parties are uncommon, which might be the result of a top-down founding of party systems where elites sought to form coalitions rather than accentuating strong cleavage lines that reflect social divisions (Bornschier 2009, 8). Simply put, the economic divide has not been politicized. Relative religious homogeneity furthermore suggests that religion should not be an important predictor of party choice in this region. In spite of differences between the countries in Latin America, cleavage

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\(^8\) Lipset and Rokkan (1967) emphasize the process of democratic transition and the consequent political conflicts in the founding of party systems. See also Bornsheir (2009, 8–9), Evans (2004, 48) and Dalton (1996, 339).
voting can be expected to be rather weak in that region in general, which should be especially true for economic and religious voting.

Another set of reestablished democracies that have a historical experience with party politics are post-socialist countries, but for an altogether different reason. These countries have recently undergone a transition from socialism to liberal-democracy which meant an extreme reorganizing of not only political system, but also social structure. On the one hand, the inherent nature and duration of socialist regimes imply a low level of class and religious voting under the succeeding regimes (van der Brug 2010, 602; Zielinski 2002, 185). Socialist regimes sought to eliminate all class and religious differences and were rather successful at abolishing private property and thus property-owning classes. Class and religious differences under such conditions should then not divide voters in their party choice. On the other hand, even political systems with previous experience of party politics require a basis for political conflict and social divisions provide a fairly straightforward instrument for this purpose (G. Evans 2000, 410). Social and religious distinctions in particular are simple cues for voters. Considering the often radical transformation of economic systems and resulting inequalities, economic divide might have become the most relevant explanation for party choice in post-socialist regimes. This latter assumption has not been confirmed, however. Roper and Fesnic (2003) in their analysis of Romania and Ukraine found that historical legacy is far more significant in determining voting patterns than socio-economic variables. Structural attributes do not explain the reform-mindedness of voters as might be expected in such transitional contexts. Similar conclusion has been made by van der Brug (2010, 596), who was unable to demonstrate significant differences in cleavage voting between Western and Eastern European countries. Nonetheless, there is a theoretical basis to the claim that cleavages are not a strong explanation for party choice in post-socialist countries.

In addition to the political and social changes, economic development can also be considered to influence the nature of cleavage voting in a country. This is above all relevant in the context of class cleavage as industrialization has completely rearranged the class structure in many countries. As previously mentioned, the traditional distinction between classes involved with manual work and those occupied with non-manual work
is no longer appropriate. This is particularly true for post-industrial societies where not only the proportions between the two classes have changed, but also their political predispositions (Nieuwbeerta 1996, 361). There is thus reason to believe that industrialization tends to rearrange cleavage structures that define the political behavior of voters. Moreover, it can be argued that such development rearranges the relationships between cleavages themselves. According to the theory of value change, voters in industrialized societies are putting more emphasis on non-material values and issues due to the increase in physical and material security (Elf 2007). This trend suggests that in industrialized countries party choice is decreasingly explainable by more traditional divides such as class and religion, whereas the value cleavage is becoming more relevant. Knutsen and Scarbrough (1995) have hypothesized that the impact of social structure on voting in advanced industrial societies is weakening while the influence of value orientations is increasing. They were only able to find some support to the second hypothesis and concluded that the impact of value orientations tends to increase relative to the influence of structural variables (Knutsen and Scarbrough 1995, 511). However, their study only included already highly industrialized countries and the comparison of more different societies might show a more contrasting picture. In any case, in more industrialized countries the effect of social structure on party choice is expected to be lower and value cleavage more prominent.
3. Measuring cleavage voting

3.1. Considerations of measurement

The concept of cleavage voting is far from being well-defined and this fact becomes quite obvious when various empirical studies on this phenomena are considered. As pointed out earlier, especially the works involved with the question of whether cleavages are in decline or not have reached very diverging conclusions. These disagreements can be at least in part attributed to “an undertheorized concept of class” (Hout, Brooks, and Manza 1995, 805) or any other social divide in that respect, but not only inconsistent definitions and conceptualization are the root of the problem. Although in cleavage voting research empirical techniques have always tended to precede theory and theory has “lagged behind measurement and modeling” (G. Evans 2000, 412), different operationalizations, data and statistical methods have also contributed to the confusions concerning the trends in cleavage voting (Best 2011, 283; Kriesi 1998, 166). Consequently, the assumptions that have been made about cleavage voting in different studies are only valid for the exact concept of cleavage as well as cleavage voting measured, depending on operationalization and methodology. Even though majority of studies on cleavage voting have focused on post-industrial countries with established democratic regimes, even variation among these seemingly homogenous societies is notable\(^9\). The results of measuring cleavage voting are thus highly influenced by data employed, and also in terms of time period that it covers. Some of these issues then deserve a more thorough enquiry and clarification here.

3.1.1. Traditional and total cleavage voting

The key point of departure in operationalizing cleavage voting is defining the link between voters representing certain cleavages and parties. Particularly evident is this respect are the contrasting approaches to class voting. Hout, Brooks and Manza (1995, 809) propose a useful distinction between traditional and total class voting. Such distinction is applicable to any divide in voting behavior, not only class. In case of

traditional class voting, blue-collar classes are strictly assumed to vote for the left whereas white-collar classes expected to prefer right-leaning parties and only these two conditions express class voting. Total class voting is in contrast simple and far less rigid as it is defined as any kind of statistical association between class and voting behavior. This difference in approaches to class cleavage has also been mentioned by Oesch (2008, 330) who noted that some scholars tend to see class voting as working class supporting left, while other perceive it simply as systematic links between different classes and parties. The latter interpretation has a critical shortcoming in that it disregards measuring a strictly theoretical association and also takes into account correlations that are merely random. Total class voting then rules out a differentiation between negative and positive class voting (Manza, Hout, and Brooks 1995, 152) which would allow to reveal “correct” class voting. I argue that such strict approach to cleavage voting as the traditional approaches to cleavage voting assume strongly limits the phenomenon and excludes an important part of patterns in voting behavior that could be otherwise observed. The narrowness of this approach is even more relevant in case of other cleavages than class. For instance, linking some employment sectors or languages to certain parties is rather questionable and examining any statistical relation in cases as such is not only more appropriate, but often the only option. Thus, here the total cleavage voting approach is taken.

3.1.2. Absolute and relative cleavage voting

Another caveat in measuring cleavage voting lies in how the magnitude of the relationship is understood, which largely concerns the method of estimating the association between a cleavage and party choice. Broadly speaking, absolute and relative measures of cleavage voting can be distinguished (Manza, Hout, and Brooks 1995, 141–3). In the former case, the proportion of voters casting a “correct” vote is calculated and this might be measured relative to the voters voting “incorrectly”, whereas relative approaches instead consider the predictive power of a cleavage and not only the gross effects. Consequently, the absolute measures are somewhat more susceptible to differences in the overall popularity of parties (Nieuwbeerta 1996, 346) and also to variation in cleavage structures (J. A. J. Evans 2004, 54; Manza, Hout, and Brooks 1995, 152). In the context of the decline of cleavages, the causes behind this phenomena can be related to structural dealignment, which indicates a decrease in the size of a social group, or behavioral dealignment that
entails a disruption of the links between a cleavage and respective party (Bornschier 2009, 4). For instance, the number of religious voters might have decreased and as a result, religious parties may be less popular, but religion may now be a much better predictor of vote choice since only religious voters keep supporting religious parties. Accordingly, De Graaf, Heath and Need (2001, 4) have highlighted the necessity to distinguish between compositional changes and changes in group solidarity and in the same vein Best (2011, 285) has argued that the proper measurement of electoral relevance of cleavages takes into account not only the loyalty, but also the size and turnout a cleavage group. Thus, the difference between the two approaches comes down to whether the goal is to measure the explanatory power of cleavages or their absolute impact on the outcomes of voting. Here the former approach is followed and the measurement of cleavage voting is focused on the predictive power of cleavages regarding party choice.

3.1.3. Bivariate and multivariate models

It has also been suggested by a number of authors\(^\text{10}\) that the measurement of cleavage voting should not be limited to bivariate analysis, but employ a research design that allows the inclusion of several variables in addition to the cleavage examined. It is important to consider the issues of endogeneity since all social cleavage variables are after all at the beginning of the causal chain leading to party choice and the relationship is mediated by more proximate variables such as attitudes and ideological predispositions (Raymond 2011, 132). Moreover, cleavages themselves may be interrelated in explaining voting behavior (Brooks, Nieuwbeerta, and Manza 2006, 93–4). For example, a bivariate analysis may demonstrate a strong association between religious cleavage and party choice, while this relationship may rather be the consequence of religious voters belonging to certain social classes and thus instead be the effect of economic cleavage. Conversely, Evans (2000, 412) has argued that including only a single independent variable is not necessarily a problem and multivariate models may render the causality redundantly vague. Returning to the previous example, class may explain the relationship between religion and party choice, but this does not change the fact that there are clear

\(^{10}\) See Brooks and Manza (1997, 939), Gidengil (1989, 567) and Hout, Brooks and Manza (1995, 806).
patterns of religious voters supporting only certain parties and thus constituting a cleavage. While such reasoning may be convincing, disregarding the complex and composite link between cleavages and party choice will very likely overestimate the effect of social cleavages. Here the necessity of multivariate analysis is taken into account. Although the impact of cleavages on voting behavior is not combined in a single model and thus measured as such, several control variables are nevertheless considered. Following some previous attempts to measure cleavage voting\textsuperscript{11}, the effects gender, age and education are included in the models measuring the impact of cleavages on party choice.

3.1.4. Level of measurement

Classic empirical works on class voting adopted a dichotomous measurement of class as well as party choice: voters belong to manual or non-manual class and parties respectively represented the left and right end of political spectrum. On the individual level, cleavages are clearly not strictly twofold and voters may have intermediary positions, but in terms of political behavior they tend to be manifested as dualistic oppositions according to Elff (Elff 2007). For instance, there may be various categories of social classes and religiosity, but ultimately in a political contest, some will be pitted against others. However, as in case of traditional cleavage voting, a dichotomous measurement of cleavages and political outcomes is also an oversimplification. Such dualistic approach to cleavages blends together possibly very different categories or categories where detailed distinction is highly significant and may lead to inaccurate conclusions as demonstrated by Manza, Hout and Brooks (1995, 147). The same is true for party choice. Not only is it difficult and often incorrect to dichotomize parties into two categories (Korpi 1972, 635), the left-right dimension may no longer accurately describe political conflict. Parties have converged on the left-right scale dimension and such perception is not relevant in case of new political issues as Van der Brug has suggested (2010, 589). These issues become

\textsuperscript{11} Some examples include Andersen and Yaish (2003, 409) who added in their analysis gender, age, education and locality; Hout, Brooks and Manza (1995, 810) who considered gender, race, region, age and education as covariates; and Oesch (2008, 341) who introduced education, gender, age and public sector employment as controls.
particularly substantial in cross-national studies where a large number of very different societies as well as political systems are compared. For these reasons here a dichotomous measurement of cleavages and parties is avoided while all other levels of measurement for variables are employed.

3.2. Methods of measurement

First major attempt at measuring cleavage voting that provided truly comparable data was Alford index of class voting that for a long time remained the standard measure of this phenomenon (Nieuwbeerta 1996, 349). This was largely due to the minimalism and technical simplicity of the measure, which was especially relevant at a time when data was scarce and electronic analysis of that data limited. The calculation of the Alford index is rather straightforward: the “percentage of persons in the non-manual occupations voting for Left parties” is subtracted from the “percentage of persons in non-manual occupations voting for Left parties” (Korpi 1972, 628). As such, it is based on a plain cross tabulation and can be perceived as the distinctiveness of manual workers from non-manual workers regarding their propensity to vote for Left. However, the measure does not have to be limited to class voting. For instance, Lijphart (1979, 444) has demonstrated that the Alford index can be used to estimate voting based on religion and language by aggregating these two variables as well as respective parties into two categories. For reasons already discussed, this measure is clearly too simple, mainly because it requires the dichotomization of variables. The first major improvement was Thomsen index that substituted the subtraction in the Alford’s index with calculating the odds of one group voting for a certain party in relation to another group voting for the same party. Logistic regression and other methods based on the odds-ratio have now become the standard instrument in cleavage voting analysis. These measures allow the inclusion of several voting outcomes and categories of cleavages and also examine the influence of several independent variables. According to Evans (2000, 408), they also estimate the strength of cleavage voting independently from the overall popularity of parties and differences in the sizes of cleavage groups. Most notable improvement to the odds-ratio is perhaps the intricate Kappa index introduced by Hout, Brooks and Manza (1995, 813) that is defined as the “standard deviation of class differences in vote choice in a given election”.
This Kappa index is estimated by making use of multinomial logistic regression (MLR) model, which has also been used in some more recent works\textsuperscript{12}, albeit in a quite different manner. Compared to most other probability models, MLR models are not as restrictive regarding the use of lower levels of measurement. Such models enable the prediction of more than two possible outcomes and dependent variable may have several categories that cannot be ordered in any meaningful way. This is a crucial condition for measuring the impact of cleavages on party choice, since the latter variable needs to be nominal if more than two parties are included in the analysis. A number of estimates can be obtained from the calculation of an MLR model that indicate the strength of association between variables involved. The regression coefficient, which in case of logistic regression models expresses the odds ratio, is an interpretable measure and can be used to assess the probability of a certain cleavage group member to vote for a certain party. However, measures that estimate how well a model performs can also be used. In this case, two methods have been employed to measure model performance in analyses of cleavage voting, namely likelihood-ratio test and Bayesian Information Criterion (BIC) statistic. Although both are based on the likelihood function, they are still often used simultaneously\textsuperscript{13} as the two methods have different implications and advantages. As Nieuwbeerta (Nieuwbeerta 1996) has suggested, unlike likelihood-ratio test, the BIC statistic penalizes the estimation for adding more parameters, but as result it is biased against indicating a better performance of a model.

Here, model performance is estimated in order to assess the strength of cleavages. However, neither the likelihood-ratio test nor BIC statistic is used here. Instead, cleavage strength is reported using multiple pseudo-$R^2$ statistics that provide a straightforward and concise expression of model performance, which is crucial when a large number of models needs to be compared. These measures, like the previous two, are based on likelihood function and it indicates how much a model including predictors is improved

\textsuperscript{12} See Andersen and Yaish (2003), Brooks, Nieuwbeerta and Manza (2006) and Jansen, De Graaf and Need (2011)

\textsuperscript{13} See for example Hout, Brooks and Manza (1995), Nieuwbeerta, De Graaf and Ultee (Nieuwbeerta, de Graaf, and Ultee 2000) and Nieuwbeerta (1996).
over the model without predictors. In other words, pseudo-\(R^2\) statistics measure the strength of association between predictors and the outcome, i.e. independent variables representing a cleavage and dependent variable representing party choice in this context. As such, the calculation of these statistics is essentially similar to likelihood-ratio test. A number of pseudo-\(R^2\) measures have been created but the most basic among these is the McFadden’s pseudo-\(R^2\). This “likelihood-ratio index” as labeled by McFadden (1978, 306) is defined by the following formula:

\[
R^2_M = 1 - \frac{L}{L_0}
\]

where \(L\) is the log likelihood of the full model and \(L_0\) is the log likelihood of the null model that only includes the intercept as a predictor. As follows, the result is mathematically bounded between 0 and 1 and the more the model is improved by the independent variables in the model, the higher is the value of the pseudo-\(R^2\) statistic. While analogous to the \(R^2\) of ordinary least squares regression, pseudo-\(R^2\) cannot be interpreted in any meaningful way in relation to data. Moreover, unlike the conventional \(R^2\), the simple McFadden’s pseudo-\(R^2\) never reaches 1 and its interpretation is different in that values as low as 0.2 to 0.4 already represent “an excellent fit” of a model (McFadden 1978, 307). These values correspond to the values of about 0.4 to 0.8 of the conventional \(R^2\) and there is a relatively stable empirical relationship between the conventional \(R^2\) and this pseudo-\(R^2\) measure (Domencich and McFadden 1975, 124). Unfortunately, due to this asymmetry, comprehending the value of this statistic is complicated and McFadden’s pseudo-\(R^2\) does not penalize a model for including too many variables. Adjusted version of McFadden’s pseudo- \(R^2\) however does this:

\[
R^2_{adj} = 1 - \frac{L - k}{L_0}
\]

where \(L\) is again the log likelihood of the full model, \(L_0\) the log likelihood of the null model and \(k\) represents the number of predictors in the model. For every predictor that does not significantly add to the model, the value of adjusted McFadden’s pseudo-\(R^2\) is decreased. Reading of this statistic is still somewhat complicated. For a more
straightforward reading of the statistic, a more complex Nagelkerke pseudo-\( R^2 \) (Nagelkerke 1991) will be also used here and this is generalized as follows:

\[
R_N^2 = \frac{1 - \left( \frac{L_0}{L} \right)^{\frac{2}{n}}}{1 - L_0^{\frac{2}{n}}}
\]

where \( L \) and \( L_0 \) again represent the log likelihoods of the full and null model respectively and \( n \) the number of observations used for calculation. According to Nagelkerke (1991, 691–2), this measure is consistent with the conventional \( R^2 \) and can be interpreted in a similar way: it is the “proportion of explained variation”. Although with methods based on the odds-ratio caution is needed with such interpretation, the fact that the Nagelkerke pseudo-\( R^2 \) ranges symmetrically from 0 to 1 means it is easier to comprehend. Additionally, it is independent of the sample size as well as units used.

Thus, the pseudo-\( R^2 \) measures used here are universal statistics that describe how well models perform in the sense that they do not require that the compared models were nested. While McFadden’s pseudo-\( R^2 \) is rather basic, its adjusted version takes into account the number of predictors. Likewise, Nagelkerke pseudo-\( R^2 \) is controls for the number of observations in a model and is simple to read. As such, taking all of these three statistics as reference point when comparing models allows for more comprehensive examination of data. For this reason, instead of utilizing a single measure, all three pseudo-\( R^2 \) measures are considered in the comparison of models in the analysis of results. Only when all three of these statistics suggest the better performance of one model over another, can some cleavages or components of cleavages with certainty assumed to be more relevant than others.

3.3. Model design

In order to calculate the association between cleavages and party choice, three types of models are developed. All of these are MLR models based on the odds-ratios. First, the effect of some basic social attributes must be isolated from the effect that cleavage has on voting behavior. It also allows the assessment of to what extent the inclusion of cleavage
components improves the performance of model. For these reasons, a base model is calculated that includes only three previously determined control variables, namely age, gender and education, and models their effect on party choice. The form of this model is following:

\[ y_{ij} = \beta_{0j} + \beta_{1j}A_i + \beta_{2j}G_i + \beta_{3j}E_i \]

where \( y_{ij} \) is the expected probability that respondent \( i \) will vote for party \( j \) and \( A \) is the age, \( G \) is the gender and \( E \) is the educational level of the respondent \( i \).

Second, to determine which component of a cleavage is best associated with party choice, component model needs to be fitted the data. In order to take into account the effect of the control variables, these are maintained in the model and a component variable is inserted. This is simple with models to which an interval, ordinal or ratio variable is added:

\[ y_{ij} = \beta_{0j} + \beta_{1j}A_i + \beta_{2j}G_i + \beta_{3j}E_i + \beta_{4j}O_i \]

where the \( O_i \) indicates a cleavage component value of respondent \( i \) that is measured on interval, ordinal or ratio scale. When variables that can only be measured categorically are included as component variables, each category of such variable is simply treated as a separate dichotomous variable.

Third, for the comparison of how strongly different cleavages are associated with party choice, all the components of a respective cleavage need to be combined in a single cleavage model for each cleavage. Thus, this model is analogous to the previous ones and the variables added to the base model depend on what kind of components the respective cleavage consists of. The exact form of cleavage model includes components, which are outlined in previous and described in this section.

3.4. Data

Some studies that have attempted to measure cleavage voting have applied various national data sets. Others have used cross-national surveys, most notably
Eurobarometer\textsuperscript{14}, but also European Values Survey, European Electoral Studies and Comparative Study of Electoral Systems. These are frequently used in combination in order to analyze and compare different variables and populations. These data sets are appropriate for examining longitudinal trends in certain countries and measuring the effect of social class on voting behavior. Thus, such data is useful for assessments of the decline of class voting in advanced industrial societies that a substantial part of the research on cleavage voting has been involved with. Most of these data sets are however very limited in geographical scope and electoral data on countries outside Northern America and Europe is scarce. An important exception is World Values Survey carried out by World Values Survey Association (2014) and this data is used here. This is motivated by the fact that WVS data sets include a considerable number of different countries and variables and these are measures consistently throughout time periods and countries. The WVS research project has surveyed people’s values and beliefs together with their socio-economic attributes since 1981 in almost 100 countries and has thus gathered comprehensive data for analyzing cleavage voting in very different political systems. For the analysis here, the third release of 6\textsuperscript{th} wave of WVS is applied. The survey of the 6\textsuperscript{th} wave was conducted between 2010 and 2014 and the third release includes data on the populations of 59 countries. Because the question on respondents’ vote choice was not asked in all of these countries, only respondents in 50 countries are included in the analysis.

3.5. Operationalization of variables

All the variables are operationalized according to the questions posed in the WVS 6\textsuperscript{th} wave questionnaire and possible answers, i.e. how the variables are constructed in the data set. This section gives an overview of how the party choice, control variables and cleavage components are linked to the variables in the data set.

**Party choice.** In the literature concerning cleavage voting, three distinct theoretical

\textsuperscript{14} Examples of studies on cleavage voting that have employed Eurobarometer data include Bellucci and Heath (2012), Best (2011), Elff (Elff 2007, 2009), Knutsen (1988) and Knutsen and Scarbrough (1995).
approaches to measuring which party a respondent supports can be found. Most unambiguous way to measure party choice is by the particular party a respondent voted for in the most recent elections, since it reflects the direct political outcomes of voting. This approach has been taken by Andersen and Yaish (2003). Also valid would be to consider it as the party that a respondent would vote for if there was an election taking place in the near future and this is how it has been understood by Oesch (2008). Most inaccurate of the three would be to assess which party a respondent supports or leans toward. At least in theory party identification is somewhat imprecise measure of party choice, but has nevertheless been consistently used and shown to conform to voting intentions (Oesch 2008, 335–6). Here the second of these possibilities is followed and party choice is quantified as the answer to the question “If there were a national election tomorrow, for which party on this list would you vote for?” (Question V228 in the questionnaire). As follows, party choice is measured as a nominal variable and its categories represent particular parties. This is in contrast to many previous works where party choice is measured indirectly\(^\text{15}\). The approach taken here most accurately reflects the choice a voter has at the ballot box and is thus most valid among other possibilities. An important caveat has to be noted, however. Since the number of parties included in the data sets of some countries is relatively large, only the voters of 9 most popular parties in each country are analyzed. The observations excluded on this basis constitute a negligible part of the data set.

Control variables. The operationalization of the three control variables is fairly straightforward. Gender (V240) is coded as dummy variable for male. Age (V242) is an answer to a question about respondent’s age and is coded as age in years. Education of a respondent is determined by her answer to the question about her highest level of education attained (V248) and this is coded on 9 levels with no formal education being

\(^{15}\) Party choice has previously been evaluated according to political orientations of parties (Andersen and Heath 2003; Elff 2009; Jansen, De Graaf, and Need 2011), classifying parties as left and right (Brooks and Manza 1997; Nieuwbeerta, de Graaf, and Ultee 2000) or associating parties with certain party families (Brooks, Nieuwbeerta, and Manza 2006; Graaf, Heath, and Need 2001).
the lowest value and university-level education the highest.

**Economic cleavage.** Class voting has traditionally been understood to separate lower classes from the middle and upper classes and characterized by lower-income groups voting for different parties than others (Lijphart 1979, 443). Here the subjective social class variable is assessed more detail. It is determined by respondent’s assessment of her class belonging (V238) and measured on 5 levels where extremes are represented by lower and upper class. Income is also based on respondent’s subjective assessment (V239) and coded as 10 different income groups. In addition to status, class voting has also been understood as expressed by work logic and manual workers have been distinguished from other voters. More recent research has applied different class schemes. Unfortunately the 2010-2014 WVS survey did not ask directly about respondent’s occupation, but includes questions about the work characteristic of respondents. Occupation variable is therefore created using three variables in the data set that describe respondent’s work. These determine whether respondent’s work involves manual or intellectual tasks (V231), routine or creative tasks (V232) and whether or not respondent has independence performing her tasks at work (V233). These work profiles for identifying different categories are similar to those outlined by Evans (2004, 61–2). All three variables are measured on a 10 point scale. In order to create one latent occupation variable, these three are first transformed into dichotomous variables representing the two extremes and then coded into a nominal occupation variable that has eight categories representing each combination of these three dichotomous variables. Employment sector variable is determined by whether respondent currently worked or had been worked for public, business or non-profit organization (V230) and is thus a

16 Probably most popular in recent cleavage voting reseach has been the Erikson–Goldthorpe–Portocarero (EGP) class scheme that has been applied in different adaptations by Andersen and Yaish (2003), Andersen and Heath (2003), Brooks and Manza (1997), Brooks, Nieuwbeerta and Manza (2006), De Graaf, Heath and Need (2001), Hout, Books and Manza (1995) and Nieuwbeerta, De Graaf and Ultee (Nieuwbeerta, de Graaf, and Ultee 2000). Others have developed their own class schemes (Oesch 2008) or followed the categories of the data set used (Elff 2009).
nominal variable including three categories.

**Religious cleavage.** In previous research on religious voting, religious cleavage has commonly been evaluated as practice of religion or as belonging to a religious denomination, in which case Protestants and Catholics are usually distinguished. Sometimes it is assessed even as a blend of these measures in order to separately examine different combinations (Andersen and Heath 2003, 305; Best 2011, 287). Here these elements of religious cleavage are individually assessed and the dualistic approach to religiosity is avoided. Practice of religion is quantified as the frequency of attending religious services apart from weddings and funerals (V145) and is measured on a scale from never to more than once a week. Subjective religiosity is determined by respondent’s assessment of whether she is a religious person, not a religious person or an atheist (V147) and used respectively as an ordinal variable. Religious denomination (V144) is measured as a nominal variable with respondents not belonging to any religion excluded from analysis.

**Residential cleavage.** This is assessed according to two components: urbanization and region. Whether the respondent resides in an urban or rural area is evaluated by the size of town where the interview with respondent was conducted (V253) and coded as ordinal variable with eight levels. Region of residence is also evaluated by the location where the survey was conducted (V256), but this is measured as a nominal variable.

**National cleavage.** There is a certain enticement to perceive the components defining national cleavage as dichotomous, since according to Lipset and Rokkan (1967, 14) an important line of conflict in party systems has historically ran between the “central nation-building culture and the increasing resistance of the ethnically, linguistically, or religiously distinct subject populations”. Accordingly, Lijphart (1979) has quantified linguistic voting as a dichotomy between speakers of the majority and minority languages. I suggest that such approach assumes too simple relationship between nationality and vote and disregards more multifaceted association. Thus, ethnicity and language are here both measured as nominal variables according to the specific language respondent speaks at home (V247) and ethnic group she belongs to (V254).
Value cleavage. Components of this cleavage are quantified by estimating the level of post-materialism and libertarianism of respondent. Respondent’s post-materialism is expressed by a specific 12-item post-materialist index (Y001) measured on a five level scale that the 2010-2014 WVS data set contains. This has been calculated according to the answers to several questions that evaluate attitudes and values of respondent. The distinction between respondents who incline towards libertarianism and those towards authoritarianism is also made using a latent variable calculated according to self-reflection of respondent. Libertarianism is expressed by being more open to new ideas and more creative (V70), being less restricted in social behavior (V77) and not prioritizing tradition and customs (V79). All three elements are measured on a six level scale and libertarianism variable is calculated as the sum of these values where 18 thus represents the highest level of libertarianism.

Most of these variables are relatively valid, since they assess structural attributes that are easily observable and quantifiable. Exception here are the variables calculated from variables in the data set, namely occupation, post-materialism and libertarianism. While they are operationalized using theoretically quite precise measures, there are certainly other methods of doing this, so these variables might be somewhat ambiguous regarding validity. In this respect, also problematic is the ethnicity variable, since the measurement of this is not consistent throughout countries. In some countries ethnicity indicates race, while in others nationality. As such it may be seen as reflecting the most relevant approach to ethnicity in every country and is not necessarily a problem, but nevertheless has to be taken into account when interpreting the results. In terms of reliability, most variables are again quite consistently measureable, apart from those dependent on subjective assessment of respondent, such as social class, religiosity and clearly the components of value cleavage. Additionally, it has to be noted that in case of some categorical variables (religious denomination, region, ethnicity and language) combinations of category and party choice that are less frequent than 10 times in the data set are not involved in the analysis. Considering the sample sizes, such occurrences are too rare to indicate reliable patterns and are likely to be random.
4. Results

In order to make conclusions about the relevance of cleavages, three types of models outlined in previous section are tested on the WVS 2010-2014 data. This includes the base model, 13 cleavage component models and 5 cleavage models. This means that for each of the 50 countries left in the data set after aggregation, a total of 19 models are tested. The fact that analyses are carried out separately in every country rather than treating all the respondents as part of a single sample is essential. This takes into consideration the individuality of political systems and allows drawing conclusions accordingly, but also permits using countries as units of analysis in further evaluations. Such approach to assessing the relevance of cleavages is very similar to Dalton’s (1996) method. However, Dalton used Cramer’s V as a measure of association for social characteristics and party preference. This measures the correlation between two variable based on a contingency table, which does not allow a more intricate analysis dependent on model design. Here statistics that have been calculated using a more complex research design are presented to describe the relationship between the attributes of voters and their party choice. When reading the tables below, it is important to keep in mind that each model was tested separately in every country and the figures describing different models presented in the tables represent means of countries.

4.1. Comparison of cleavage components

To begin with, the comparison of the salience of cleavage components in party choice is analyzed. Regarding the economic cleavage components, the results of the analysis reported in table 1 seem to be in line with previous research that has focused on class and occupation as the main elements of economic cleavage in voting behavior. However, it is less clear which of the two is more significant. Considering the $R^2_N$ estimate, occupation indicates a much higher association with party choice, while the value of $R^2_{adj}$ statistic suggests that this is largely due to the number of independent variables included in the model and these do not actually improve it. Unexpected is the income model that turns from least relevant model into the best fitting one once the number of parameters is controlled for. This implies that the parameters included in the income model are most
relevant compared to other economic cleavage models, but overall the performance of income component model is still the lowest. It also remains undecided whether the employment sector or income has a stronger relationship with vote choice. The only conclusion that can be drawn from the performance of economic cleavage components is then that social class and occupation tend to be more relevant attributes in cleavage voting than income and sector of employment. This leaves the assumption that a complex measure of voters occupation most accurately predicts party choice unclear, since it was not possible to determine, whether or not occupation is a better predictor of party choice.

Table 1. Selected statistics describing the economic cleavage components statistics.

<table>
<thead>
<tr>
<th></th>
<th>Social class</th>
<th>Income</th>
<th>Occupation</th>
<th>Employment sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R_N^2$</td>
<td>.17</td>
<td>.14</td>
<td>.21</td>
<td>.15</td>
</tr>
<tr>
<td>$R_M^2$</td>
<td>.063</td>
<td>.049</td>
<td>.077</td>
<td>.055</td>
</tr>
<tr>
<td>$R_{adj}^2$</td>
<td>.014</td>
<td>.016</td>
<td>-.0046</td>
<td>.011</td>
</tr>
<tr>
<td>BIC</td>
<td>1701</td>
<td>2505</td>
<td>2466</td>
<td>2300</td>
</tr>
<tr>
<td>Chi$^2$</td>
<td>96</td>
<td>114</td>
<td>150</td>
<td>112</td>
</tr>
<tr>
<td>Parameters</td>
<td>32</td>
<td>33</td>
<td>78</td>
<td>46</td>
</tr>
<tr>
<td>Observations</td>
<td>611</td>
<td>927</td>
<td>834</td>
<td>829</td>
</tr>
</tbody>
</table>

Religious cleavage is mostly defined by religious denomination as all the values of pseudo-$R^2$ measures in table 2 imply. While in terms of the $R_N^2$ and $R_M^2$ statistics, religious denomination model performs notably better than the other two, this difference becomes less substantial when the number of parameters is also considered. Nevertheless, religious denomination is according to the results in table 4 still best predictor of party choice when compared to other components of the religious cleavage. Models including the practice of religion and subjective religiosity are fairly similar to one another in terms of the estimates reported in table 2. It is however apparent that subjective religiosity model is not the most preferred here.
Table 2. Selected statistics describing the religious cleavage components statistics.

<table>
<thead>
<tr>
<th></th>
<th>Practice</th>
<th>Subjective religiosity</th>
<th>Denomination</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2_N$</td>
<td>.15</td>
<td>.15</td>
<td>.21</td>
</tr>
<tr>
<td>$R^2_M$</td>
<td>.056</td>
<td>.054</td>
<td>.084</td>
</tr>
<tr>
<td>$R^2_{adj}$</td>
<td>.024</td>
<td>.021</td>
<td>.025</td>
</tr>
<tr>
<td>BIC</td>
<td>2568</td>
<td>2512</td>
<td>2041</td>
</tr>
<tr>
<td>Chi$^2$</td>
<td>136</td>
<td>124</td>
<td>152</td>
</tr>
<tr>
<td>Parameters</td>
<td>33</td>
<td>33</td>
<td>57</td>
</tr>
<tr>
<td>Observations</td>
<td>957</td>
<td>924</td>
<td>739</td>
</tr>
</tbody>
</table>

The estimates of the residential cleavage component models tests in table 4 reveal a substantial contrast between the performance of the urbanization and region models. Even after the number of parameters are controlled for, the values of all the pseudo-$R^2$ statistics of region model still remain at least twice as high when compared to those describing the performance of the urbanization model. While the BIC statistic suggests an opposing inference, this is because this measure penalizes models more severely for the number of parameters than the $R^2_{adj}$ estimate. There appear to be considerable differences between regions in terms of party choice. In any case, region is more relevant in determining party choice in comparison to the level of urbanization.

Table 3. Selected statistics describing the residential cleavage components statistics.

<table>
<thead>
<tr>
<th></th>
<th>Urbanization</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2_N$</td>
<td>.15</td>
<td>.31</td>
</tr>
<tr>
<td>$R^2_M$</td>
<td>.054</td>
<td>.14</td>
</tr>
<tr>
<td>$R^2_{adj}$</td>
<td>.02</td>
<td>.042</td>
</tr>
<tr>
<td>BIC</td>
<td>2580</td>
<td>2731</td>
</tr>
<tr>
<td>Chi$^2$</td>
<td>127</td>
<td>333</td>
</tr>
<tr>
<td>Parameters</td>
<td>34</td>
<td>100</td>
</tr>
<tr>
<td>Observations</td>
<td>926</td>
<td>962</td>
</tr>
</tbody>
</table>

Unlike in case of previous cleavages, the components of national cleavage do not seem to differ almost at all. While the estimates in table 4 imply a slightly better performance
of the ethnicity model, differences that minor can be considered trivial. Interestingly, the $R^2_{\text{adj}}$ of both models is relatively high when compared to all others, which suggests that all or most categories of language as well as ethnicity tend to have some effect on party choice. Although in the data set used for the analysis ethnicity was not consistently in every country regarded as an equivalent to nationality, the language and ethnicity variables may again measure the same phenomenon. The results of table 6 seem to support this assumption, since when both variables are included in the same model to explain party choice, the parameters do not all add significantly to the model. This nevertheless means that ethnicity is not a better predictor of vote choice, but both have a very similar effect on voting.

Table 4. Selected statistics describing the national cleavage components statistics.

<table>
<thead>
<tr>
<th></th>
<th>Language</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2_N$</td>
<td>.2</td>
<td>.2</td>
</tr>
<tr>
<td>$R^2_M$</td>
<td>.084</td>
<td>.084</td>
</tr>
<tr>
<td>$R^2_{\text{adj}}$</td>
<td>.039</td>
<td>.038</td>
</tr>
<tr>
<td>BIC</td>
<td>2646</td>
<td>2632</td>
</tr>
<tr>
<td>Chi$^2$</td>
<td>241</td>
<td>230</td>
</tr>
<tr>
<td>Parameters</td>
<td>61</td>
<td>58</td>
</tr>
<tr>
<td>Observations</td>
<td>986</td>
<td>961</td>
</tr>
</tbody>
</table>

Despite that the estimates for the components of value cleavage in table 5 also do not seem to vary too much, the difference is nonetheless notable. Post-materialism model according to all the estimates in the table performs to some extent better than libertarianism model. This suggests that the division between post-materialists and materialists is more relevant than the traditionalist-libertarianist distinction, although the difference in the performance of the two models is not substantial.
Table 5. Selected statistics describing the value cleavage components statistics.

<table>
<thead>
<tr>
<th></th>
<th>Post-materialism</th>
<th>Libertarianism</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2_N$</td>
<td>.15</td>
<td>.14</td>
</tr>
<tr>
<td>$R^2_M$</td>
<td>.054</td>
<td>.05</td>
</tr>
<tr>
<td>$R^2_{adj}$</td>
<td>.019</td>
<td>.016</td>
</tr>
<tr>
<td>BIC</td>
<td>2430</td>
<td>2509</td>
</tr>
<tr>
<td>Chi$^2$</td>
<td>120</td>
<td>114</td>
</tr>
<tr>
<td>Parameters</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Observations</td>
<td>900</td>
<td>915</td>
</tr>
</tbody>
</table>

4.1. Relevance of cleavages

The models of cleavage components behave fairly differently when tested on data, but how do the cleavage models compare? Different statistics that are used to describe the base and cleavage models which include all respective components are reported in table 6. Examining the values of $R^2_N$, economic cleavage emerges as the most relevant in predicting party choice, with residential cleavage as a close runner-up. However, when $R^2_{adj}$ value of the same models is considered, economic cleavage model becomes the least preferred. This implies that economic cleavage model includes a lot of redundant predictors that do not significantly improve it, although its weakness might also be the result of the fact that economic cleavage models on average include less observations in its testing as both McFadden’s pseudo-$R^2$ measures seem to suggest. Other models seem to be more consistent in terms of the three pseudo-$R^2$ values. Religious and national cleavage models are both to the same degree weaker that the two preferred models, with religious cleavage being on average somewhat more relevant than national cleavage. As might have been expected, the value cleavage is substantially weaker than other cleavages and indicates only a slight improvement to the base model. While it is not absolutely clear from table 6 whether economic or residential cleavage model should be preferred, the latter is nevertheless more relevant than religious cleavage. This suggests that economic and religious cleavages are not better than others at explaining party choice as assumed.
Table 6. Selected statistics describing the base model and five cleavage models.

<table>
<thead>
<tr>
<th></th>
<th>Base</th>
<th>Economic</th>
<th>Religious</th>
<th>Residential</th>
<th>National</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2_N$</td>
<td>.11</td>
<td>.34</td>
<td>.25</td>
<td>.32</td>
<td>.22</td>
<td>.16</td>
</tr>
<tr>
<td>$R^2_M$</td>
<td>.039</td>
<td>.14</td>
<td>.1</td>
<td>.15</td>
<td>.088</td>
<td>.061</td>
</tr>
<tr>
<td>$R^2_{adj}$</td>
<td>.013</td>
<td>-.023</td>
<td>.031</td>
<td>.044</td>
<td>.028</td>
<td>.021</td>
</tr>
<tr>
<td>BIC</td>
<td>2523</td>
<td>1777</td>
<td>1869</td>
<td>2835</td>
<td>2508</td>
<td>2481</td>
</tr>
<tr>
<td>Chi²</td>
<td>93</td>
<td>178</td>
<td>181</td>
<td>351</td>
<td>221</td>
<td>138</td>
</tr>
<tr>
<td>Parameters</td>
<td>27</td>
<td>106</td>
<td>62</td>
<td>110</td>
<td>78</td>
<td>39</td>
</tr>
<tr>
<td>Observations</td>
<td>944</td>
<td>543</td>
<td>701</td>
<td>981</td>
<td>891</td>
<td>905</td>
</tr>
</tbody>
</table>

4.2. Regional differences

When conclusions have been made about the performance of cleavage models in general, it is appropriate to examine how these trends relate to different world’s regions. In order to evaluate differences between world’s regions, three distinctions between countries were made. South American, post-socialist and highly industrialized countries were distinguished from those that do not belong to these categories. The differences in the performance of models in table 7 demonstrates some interesting peculiarities of South American countries. A notable contrast lies in the values of $R^2_{adj}$ that tend to be negative in case of these countries. This is not only because on average the models of South American countries tend to include more parameters, but it very likely indicates that not all components of the cleavages or categories of these components matter in South America as much as they do elsewhere. For instance the economic cleavage seems to be significantly higher in South America according to the $R^2_N$ statistic, but the value of $R^2_{adj}$ implies the opposite, despite that on average the respective models contain less parameters. It is however noteworthy that while all the models perform worse in South

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17 In the analysis, Argentina, Brazil, Chile, Colombia, Ecuador, Peru and Uruguay were considered as South American countries. The category of Post-socialist was comprised of countries such as Azerbaijan, Armenia, Estonia, Kazakhstan, Kyrgyzstan, Poland, Romania, Russia, Slovenia and Ukraine. The category of highly industrialized countries included Australia, Germany, Estonia, Japan, South Korea, Netherlands, New Zealand, Poland, Slovenia, Sweden and United States.
America, a remarkable exception is the economic cleavage model. Economic cleavage seems to be much more associated with party choice than in other continents. In contrast to some previous research (Bellucci and Heath 2012, 111), the results presented here suggest that higher economic inequalities might indeed have led to higher level voting on economic basis in South America. Another noteworthy dissimilarity is the national cleavage that does not seem to be a very good predictor of party choice in South America, despite the notable ethnic variations. Even though the magnitudes of the figures in table 8 are relatively small, cleavage voting in South America seems to be somewhat lower than elsewhere according to most of the estimates.

**Table 7.** Comparison of cleavage models statistics for South American and other countries.

<table>
<thead>
<tr>
<th>South America</th>
<th>Base</th>
<th>Economic</th>
<th>Religious</th>
<th>Residential</th>
<th>National</th>
<th>Value</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2_N$</td>
<td>.093</td>
<td>.42</td>
<td>.23</td>
<td>.3</td>
<td>.16</td>
<td>.14</td>
<td>.24</td>
</tr>
<tr>
<td>$R^2_M$</td>
<td>.032</td>
<td>.18</td>
<td>.083</td>
<td>.13</td>
<td>.057</td>
<td>.048</td>
<td>.098</td>
</tr>
<tr>
<td>$R^2_{adj}$</td>
<td>.0036</td>
<td>-.048</td>
<td>-.045</td>
<td>-.013</td>
<td>-.012</td>
<td>.0017</td>
<td>-.022</td>
</tr>
<tr>
<td>BIC</td>
<td>1836</td>
<td>1248</td>
<td>1462</td>
<td>2239</td>
<td>2099</td>
<td>1750</td>
<td>1841</td>
</tr>
<tr>
<td>Chi2</td>
<td>58</td>
<td>143</td>
<td>93</td>
<td>216</td>
<td>105</td>
<td>77</td>
<td>131</td>
</tr>
<tr>
<td>Parameters</td>
<td>25</td>
<td>97</td>
<td>80</td>
<td>121</td>
<td>75</td>
<td>36</td>
<td>84</td>
</tr>
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<td>Observations</td>
<td>640</td>
<td>317</td>
<td>380</td>
<td>635</td>
<td>656</td>
<td>546</td>
<td>556</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outside of South America</th>
<th>Base</th>
<th>Economic</th>
<th>Religious</th>
<th>Residential</th>
<th>National</th>
<th>Value</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2_N$</td>
<td>.11</td>
<td>.33</td>
<td>.25</td>
<td>.33</td>
<td>.24</td>
<td>.17</td>
<td>.26</td>
</tr>
<tr>
<td>$R^2_M$</td>
<td>.04</td>
<td>.14</td>
<td>.11</td>
<td>.15</td>
<td>.098</td>
<td>.063</td>
<td>.1</td>
</tr>
<tr>
<td>$R^2_{adj}$</td>
<td>.015</td>
<td>-.018</td>
<td>.034</td>
<td>.061</td>
<td>.042</td>
<td>.024</td>
<td>.02</td>
</tr>
<tr>
<td>BIC</td>
<td>2638</td>
<td>1871</td>
<td>1890</td>
<td>3014</td>
<td>2645</td>
<td>2596</td>
<td>2367</td>
</tr>
<tr>
<td>Chi2</td>
<td>98</td>
<td>184</td>
<td>186</td>
<td>392</td>
<td>259</td>
<td>147</td>
<td>209</td>
</tr>
<tr>
<td>Parameters</td>
<td>27</td>
<td>108</td>
<td>61</td>
<td>106</td>
<td>79</td>
<td>40</td>
<td>76</td>
</tr>
<tr>
<td>Observations</td>
<td>995</td>
<td>583</td>
<td>717</td>
<td>1084</td>
<td>969</td>
<td>961</td>
<td>826</td>
</tr>
</tbody>
</table>
When the former socialist countries are compared to others, cleavage models display varying trends as illustrated in table 8. While the economic and value cleavages do not appear to differ at all, the other three cleavage models produce much higher pseudo-$R^2$ estimates. In case of the religious and residential models however the higher value of these statistics seem to be caused largely by the higher number of parameters that do not add to the models, whereas the national cleavage model maintains its better performance even the value of $R^2_{adj}$ is taken into consideration.

**Table 8.** Comparison of cleavage models statistics for post-socialist and other countries.

<table>
<thead>
<tr>
<th>Post-socialist</th>
<th>Base</th>
<th>Economic</th>
<th>Religious</th>
<th>Residential</th>
<th>National</th>
<th>Value</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2_N$</td>
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<td>.34</td>
<td>.31</td>
<td>.37</td>
<td>.31</td>
<td>.16</td>
<td>.3</td>
</tr>
<tr>
<td>$R^2_{adj}$</td>
<td>.014</td>
<td>-.039</td>
<td>.0052</td>
<td>.049</td>
<td>.079</td>
<td>.019</td>
<td>.0091</td>
</tr>
<tr>
<td>BIC</td>
<td>2821</td>
<td>2045</td>
<td>2933</td>
<td>3149</td>
<td>3671</td>
<td>2752</td>
<td>2644</td>
</tr>
<tr>
<td>Chi2</td>
<td>102</td>
<td>176</td>
<td>237</td>
<td>411</td>
<td>413</td>
<td>132</td>
<td>246</td>
</tr>
<tr>
<td>Parameters</td>
<td>29</td>
<td>122</td>
<td>120</td>
<td>130</td>
<td>85</td>
<td>44</td>
<td>100</td>
</tr>
<tr>
<td>Observations</td>
<td>989</td>
<td>572</td>
<td>656</td>
<td>1018</td>
<td>1280</td>
<td>942</td>
<td>839</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Not post-socialist</th>
<th>Base</th>
<th>Economic</th>
<th>Religious</th>
<th>Residential</th>
<th>National</th>
<th>Value</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2_N$</td>
<td>.11</td>
<td>.34</td>
<td>.24</td>
<td>.3</td>
<td>.2</td>
<td>.16</td>
<td>.24</td>
</tr>
<tr>
<td>$R^2_M$</td>
<td>.039</td>
<td>.14</td>
<td>.1</td>
<td>.14</td>
<td>.082</td>
<td>.061</td>
<td>.1</td>
</tr>
<tr>
<td>$R^2_{adj}$</td>
<td>.013</td>
<td>-.017</td>
<td>.032</td>
<td>.041</td>
<td>.018</td>
<td>.022</td>
<td>.015</td>
</tr>
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<td>BIC</td>
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<td>1691</td>
<td>1816</td>
<td>2696</td>
<td>2276</td>
<td>2421</td>
<td>2209</td>
</tr>
<tr>
<td>Chi2</td>
<td>90</td>
<td>178</td>
<td>178</td>
<td>325</td>
<td>182</td>
<td>139</td>
<td>186</td>
</tr>
<tr>
<td>Parameters</td>
<td>26</td>
<td>101</td>
<td>59</td>
<td>101</td>
<td>76</td>
<td>39</td>
<td>71</td>
</tr>
<tr>
<td>Observations</td>
<td>934</td>
<td>534</td>
<td>703</td>
<td>964</td>
<td>813</td>
<td>896</td>
<td>774</td>
</tr>
</tbody>
</table>

It is noteworthy that all the pseudo-$R^2$ statistics for national cleavage model are markedly higher in former socialist countries than elsewhere. This should not be unexpected considering that these countries are nationally heterogeneous. In terms of the historical heritage of most of the post-socialist countries, it should not be thus surprising that
linguistic and national divides provide the main political conflict. Although religious and residential cleavages might also seem considerably more relevant in these countries according to the estimates in table 8, some of the components of these cleavages are redundant and do not actually increase the performance of the respective models. Nonetheless, cleavage voting in post-communist countries appears to be on average higher than elsewhere.

Comparison of highly and less industrialized countries in table 9 again demonstrates that cleavage models perform differently in different contexts.

**Table 9.** Comparison of cleavage models statistics for highly and less industrialized countries.

<table>
<thead>
<tr>
<th></th>
<th>Base</th>
<th>Economic</th>
<th>Religious</th>
<th>Residential</th>
<th>National</th>
<th>Value</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Highly industrialized</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( R^2_N )</td>
<td>.12</td>
<td>.36</td>
<td>.17</td>
<td>.31</td>
<td>.25</td>
<td>.21</td>
<td>.27</td>
</tr>
<tr>
<td>( R^2_M )</td>
<td>.04</td>
<td>.14</td>
<td>.076</td>
<td>.1</td>
<td>.1</td>
<td>.079</td>
<td>.1</td>
</tr>
<tr>
<td>( R^2_{adj} )</td>
<td>.018</td>
<td>-.016</td>
<td>.007</td>
<td>.033</td>
<td>.074</td>
<td>.039</td>
<td>.019</td>
</tr>
<tr>
<td>BIC</td>
<td>2874</td>
<td>1914</td>
<td>1440</td>
<td>4202</td>
<td>2998</td>
<td>2598</td>
<td>2420</td>
</tr>
<tr>
<td>Chi2</td>
<td>110</td>
<td>192</td>
<td>97</td>
<td>367</td>
<td>294</td>
<td>185</td>
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<tr>
<td>Parameters</td>
<td>27</td>
<td>109</td>
<td>48</td>
<td>118</td>
<td>60</td>
<td>41</td>
<td>73</td>
</tr>
<tr>
<td>Observations</td>
<td>965</td>
<td>506</td>
<td>644</td>
<td>1112</td>
<td>1127</td>
<td>870</td>
<td>756</td>
</tr>
<tr>
<td><strong>Less industrialized</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( R^2_N )</td>
<td>.11</td>
<td>.33</td>
<td>.26</td>
<td>.33</td>
<td>.22</td>
<td>.15</td>
<td>.25</td>
</tr>
<tr>
<td>( R^2_M )</td>
<td>.039</td>
<td>.14</td>
<td>.11</td>
<td>.16</td>
<td>.085</td>
<td>.054</td>
<td>.1</td>
</tr>
<tr>
<td>( R^2_{adj} )</td>
<td>.011</td>
<td>-.025</td>
<td>.035</td>
<td>.046</td>
<td>.019</td>
<td>.015</td>
<td>.012</td>
</tr>
<tr>
<td>BIC</td>
<td>2409</td>
<td>1725</td>
<td>1941</td>
<td>2587</td>
<td>2410</td>
<td>2437</td>
<td>2247</td>
</tr>
<tr>
<td>Chi2</td>
<td>87</td>
<td>173</td>
<td>195</td>
<td>348</td>
<td>206</td>
<td>120</td>
<td>196</td>
</tr>
<tr>
<td>Parameters</td>
<td>26</td>
<td>105</td>
<td>65</td>
<td>108</td>
<td>82</td>
<td>39</td>
<td>78</td>
</tr>
<tr>
<td>Observations</td>
<td>937</td>
<td>557</td>
<td>710</td>
<td>957</td>
<td>844</td>
<td>918</td>
<td>796</td>
</tr>
</tbody>
</table>

The economic, residential and national cleavages do not seem to affect party choice
differently in countries that are more industrialized compared to others, while religious and value cleavages indicate to some extent dissimilar trends. Religious cleavage model is much weaker according to the values of all of the pseudo-$R^2$ statistics, whereas value cleavage model performs much better in the category of countries examined here. As previously described, these two cleavages are related and expected to behave in this way in more developed countries, where secularization has led to the decrease of religious sentiment among voters. Thus, the assumption that value cleavage is more relevant in highly industrialized countries finds support here.
Conclusions

There are various theories that have attempted to distinguish and map the motives behind voting behavior. Yet, a number of approaches have in this regard often emphasized the influence of social structure that has the capacity to directly or via other phenomena to affect party choice. It is this relationship between different divides in society and party choice that this thesis intended to shed light on. In particular, the aim was here to compare the significance of five cleavages in different political systems and reveal which of these has the highest impact on party choice. In addition to cleavages, the social and value divisions that define these cleavages were also compared to one another and a comparison of some regional differences in cleavage voting was also included.

The components of economic cleavage that encompasses subjective social class, occupation, income and employment sector, demonstrated statistically indecisive results regarding the performance of respective models. While it was not possible to determine which of these variables best explains party choice, social class and occupation models tended to be more preferred than income and employment sector models. This is somewhat expected, since class and occupation have been in the focus of much previous research on cleavage voting. In case of religious voting it was assumed that subjective religiosity rather than practice of religion or religious denomination best explains party choice. Empirical evidence however unambiguously suggested that it is the latter variable that best predicts party choice while subjective religiosity and practices have a similar effect. This might suggest that these two variables measure more or less the same phenomenon in the context of party choice. Analogous observation was made in case of language and ethnicity that define the nationality cleavage. Although there was reason to believe that ethnicity that entails more social and cultural differences than language and is thus more relevant for voting behavior, models for both of these variables had almost identical performance. The components of value cleavage were also observed to perform fairly similarly in the analysis, although post-materialism was found to be somewhat more relevant than libertarianism variable in party choice. This was expected, since the authoritarianism-libertarianism divide is much more limited.
Most decisive differences among components of cleavages were witnessed in case of residential cleavage. All the estimates taken as a point of departure in the analysis here implied that region in which voter resides is substantially more relevant predictor of vote choice than the level of urbanization. This suggests that party choice is very much dependent on geographical location, which should not be surprising, considering that even the level of urbanization varies from one region to another.

The significance of residential cleavage furthermore became apparent in the comparison of the performance of cleavage models. Although it could be theoretically assumed that economic and religious cleavages are most salient, this assumption was not supported by empirical findings. Economic cleavage was statistically very relevant in explaining vote choice but not unquestionably so, and residential cleavage can be considered to be even more important in this respect. Contrary to expectations, religious and national cleavage were the second most relevant group of cleavages, with religion having a slightly higher influence on party choice. The relative irrelevance of the value cleavage in voting behavior should not be surprising, considering that it is usually considered as a fairly new phenomenon and not very strongly rooted in social structure.

These contrasts between cleavages are however considerably altered when different parts of the world are differentiated. According to previous literature there was reason to believe three world’s regions to demonstrate different patterns of cleavage voting. While it had traditionally been assumed that cleavage voting is a rare phenomenon in South America, analysis here found an important exception to this tendency. Economic cleavage seems to be much more relevant in South America than elsewhere, which should not be surprising in the context of notable economic inequalities. Whereas cleavage voting is usually found to be weaker in new democracies, this was not found to be true for former socialist countries. While most cleavages seem to have a stronger influence on party choice in post-socialist countries, only national cleavage was unambiguously more important than elsewhere. This trend can be explained by the higher national heterogeneity of and respective conflicts in post-socialist countries. Finally, the balance of cleavages in highly industrialized countries was very similar to what different theories of modernization have suggested. In countries belonging to this group, value cleavage is
markedly more substantial in predicting party choice, while religious cleavage is not as important as elsewhere. These are only some patterns among countries in cleavage voting and exploring such trends definitely deserves further attention.

It is noteworthy that residential cleavage tended to be constantly salient in different political systems. Considering that most literature on cleavage voting has so far almost exclusively focused on class and religious cleavages, the prominence of residential cleavage might be somewhat unexpected. This should however be anticipated when it is recognized that regions that define the residential cleavage are “containers” of other differences (Gidengil 1989, 564–5). As such, the region variable encompasses various contrasts among voters since regions themselves often differ greatly in terms of economy, religion and culture. Whether or not the significance of residential cleavage is an effect of other variables is however outside the scope of this analysis, but it certainly is a relevant question for further research on cleavage voting.
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“Ethnic Heterogeneity in the Social Bases of Voting at the 2010 British General 


Appendices

Appendix 1. Coding of variables. Number of categories express the maximum number of unique categories within countries and the actual number differs from one country to another. All continuous variables except for gender are coded from lowest level or frequency to highest.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level of measurement</th>
<th>Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Party choice</td>
<td>Categorical</td>
<td>9 categories</td>
</tr>
<tr>
<td>Gender</td>
<td>Continuous</td>
<td>0-1 (1 for male)</td>
</tr>
<tr>
<td>Age</td>
<td>Continuous</td>
<td>16-99</td>
</tr>
<tr>
<td>Education</td>
<td>Continuous</td>
<td>1-9</td>
</tr>
<tr>
<td>Social class</td>
<td>Continuous</td>
<td>1-5</td>
</tr>
<tr>
<td>Income</td>
<td>Continuous</td>
<td>1-10</td>
</tr>
<tr>
<td>Occupation</td>
<td>Categorical</td>
<td>8 categories</td>
</tr>
<tr>
<td>Employment sector</td>
<td>Categorical</td>
<td>3 categories</td>
</tr>
<tr>
<td>Practice of religion</td>
<td>Continuous</td>
<td>1-7</td>
</tr>
<tr>
<td>Subjective religiosity</td>
<td>Continuous</td>
<td>1-3</td>
</tr>
<tr>
<td>Religious denomination</td>
<td>Categorical</td>
<td>53 categories</td>
</tr>
<tr>
<td>Region</td>
<td>Categorical</td>
<td>42 categories</td>
</tr>
<tr>
<td>Urbanization</td>
<td>Continuous</td>
<td>1-8</td>
</tr>
<tr>
<td>Language</td>
<td>Categorical</td>
<td>32 categories</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Categorical</td>
<td>40 categories</td>
</tr>
<tr>
<td>Libertarianism</td>
<td>Continuous</td>
<td>3-18</td>
</tr>
<tr>
<td>Post-materialism</td>
<td>Continuous</td>
<td>0-5</td>
</tr>
</tbody>
</table>
Kokkuvõte

„Sotsiaalsed erinevused valimiskäitumist määramas: lõhede mõju erakonnavalikule“


Samas ei ole viimati mainitud põhjustlik seis aga tingimata ühepoolne. Ühest küljest pakuvad erakonnad ühiskondlikele lõhedele väljundit, ilma milleta ei oleks need
poliitiliselt olulised, samuti on erakondel võimalused poliitilist konflikti kujundada ja seeläbi määratelda olulisimad lõhed. Teisalt on erakonnad selles otseselt sõltuvad valijatest ja vähemalt mingil määral peab lõhedepeõhine hääletamine kajastama alati sotsiaalseid erinevusi. Viimane lähenemine on seega selgeminõ mõistetav ja võetud käesolevas töös lähtepunktiks lõhedepeõhise hääletamise käsitlusele.

Millised on siis need ühiskondlikud erinevused, mida võiks nimetada lõhedeks erakonnvaliku kontekstis? Varasemates uuringutes on kahtlemata enim tähelepanu pälvinud sotsiaalne klass ja religioon, mis iseloomustavad poliitiliste küsimuste puhul vastavalt majanduslikku ja moraalset dimensiooni. Lõhedenä on käsitletud ka selliseid tunnuseid nagu sugu, vauns ja haridus, ent kuna ei ole selget teoreetilist põhjendust, mis need eripärad peaksid valijate otsuseid mõjutama, siis käesolevas töös on need arvesse võtnud arvesse vaid riigid, millel on suurenevalt selgetest sotsiaalsetest erinevustest. Suurendamisel pälvinud sotsiaalset klasist ja religiooni, mis on iseloomustatud poliitiliste küsimuste puhul vastavalt majanduslikku ja moraalset dimensiooni. Lõhedenä on käsitletud ka selliseid tunnuseid nagu sugu, vauns ja haridus, ent kuna ei ole selget teoreetilist põhjendust, miks need eripärad peaksid valijate otsuseid mõjutama, siis käesolevas töös on need arvesse võtnud arvesse vaid riigid, millel on suurenevalt selgetest sotsiaalsetest erinevustest.

Seetõttu on oluline arvestada ka sotsiaaltõhusõnastest erinevustest. Millised on siis need ühiskondlikud erinevused, mida võiks nimetada lõhedeeks erakonnvaliku kontekstis? Varasemates uuringutes on kahtlemata enim tähelepanu pälvinud sotsiaalne klass ja religioon, mis iseloomustavad poliitiliste küsimuste puhul vastavalt majanduslikku ja moraalset dimensiooni. Lõhedenä on käsitletud ka selliseid tunnuseid nagu sugu, vauns ja haridus, ent kuna ei ole selget teoreetilist põhjendust, miks need eripärad peaksid valijate otsuseid mõjutama, siis käesolevas töös on need arvesse võtnud arvesse vaid riigid, millel on suurenevalt selgetest sotsiaalsetest erinevustest.
majanduslikult enam arenenud riikides on erakonnaaliku puhul järjest olulisemaks muutumas hoiakud ja väärteased, mis võrreldes teiste maadega seega tööstusriikides ka lõhedepeõhisest häältenimeses rohkem kajastuvad.


Ka riikide võrdluse puhul ei viidanud empitiriline analüüs kõigi eelduste paikapidavuselle. Kuigi Lõuna-Ameerikas ei seleta lõheid tõepoolest erakonnaalikut nii selgelt kui mujal, võib seal täheldada majandusliku lõhe ülekaalukat domineerimist. Samas on post-
sotsialistlikes riikides lõhdepõhine hääletamine aga mõnevõrra levinum kui teistes maades ja eriti tugevalt on antud piirkonnas poliitiliste eelistustega seotud rahvus. Kõrge majandusliku arenguga riikide puhul ei leidnud kinnitust mitte ainult eeldus, et väärtustepõhine hääletamine on kõrgem, vaid selgus ka asjaolu, et religioon on neis maades valimisotsuste puhul vähem oluline tegur.