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**Electoral Choice in Multidimensional Party Systems**

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**Abstract**

The diversity of issue interests and party options in multiparty systems makes individual electoral decisions increasingly complex. Voters are challenged to find a political party that represents their own political views in this more complex political space. This research offers a new methodological approach to studying voting choice in a multidimensional party space. We integrate the issue preferences of European voters and the issue preferences of party elites in a two-dimensional model of electoral choice. A common space of political competition for citizens and party elites is defined by the economic and cultural cleavages using data from the 2009 European Elections Studies (EES). Our innovation is to employ multilevel structural equation modeling to address the unique statistical challenges of a multi-dimensional party space, mass-elite comparisons, and cross-national analysis. This new approach generates results that are distinctly different from previous studies—even those using the same dataset. By factoring in the measurement of issue dimensions, economic issues have a stronger impact than recognized using previous methodologies, with more modest cultural influences on voting. Moreover, there are significant cross-over effects of the two cleavages in voters' choices. The results reveal the complexity of realignment between voters and political parties in Western Europe.

Keywords: European Parliament, elections, voting behavior, economic cleavage, cultural cleavage, party elites, realignment, structural equation model.

## Introduction

People ideally vote for parties that represent their political views. At least that is what we assume if democratic representation is to function effectively. But contemporary politics is complex. Many issues are relevant to the voters and their electoral choice. It is not just about left or right, at least not in European multiparty systems. Large parts of the well-educated middle class now support Green and other progressive parties instead of traditional center-right parties (Dolezal 2010). Similarly, parts of the traditional social democratic working-class electorate have turned to new far-right parties to represent their culturally conservative views (Spies 2013). And the representatives of the traditional party families—Social Democrats, Conservatives, Liberals, and others—still compete for voter support.

In line with several other recent studies, we posit that political competition in many established democracies can be reasonably summarized by a two-dimensional space. Political decisions should, therefore, be modeled accordingly. One dimension reflects the long-standing conflicts over economic well-being and the role of the state; the second is a mix of social and cultural issues. However, nearly all previous empirical research focuses on a one-dimensional relationship based on Left-Right positions, a single-issue dimension, or a categoric relationship without measuring party positions. Despite the merits of prior studies in understanding electoral choice, empirical evidence on voter choices in a two-dimensional political space remains underdeveloped.

Our research contributes to the existing literature by examining the multi-dimensionality of political issues and how they relate to voting choice. Essentially, we are interested in how voters choose a party that best reflects their political views in a multi-dimensional space. Thus, we contribute to the current literature in two significant ways. First, we provide evidence on the two-dimensional space of political issues for both the West European mass public and party elites. Second, we analyze vote choice to simultaneously differentiate the two issue components and estimate their distinct effects of both dimensions on voter choice.

To examine our research questions, we sought comparable cross-national evidence on voter and party issue positions. We rely on the European Election Study 2009 that interviewed representative public samples and Candidates for the European Parliament (CEPs). We initially develop a measurement model to determine the dimensionality of the issue space and the robustness of concept measurement. This determines the dimensionality of policy cleavages for voters with parallel analyses for CEPs. Then, we match the data on party positions to the general public survey. We use structural equation models (SEM) to estimate *a two-dimensional electoral decision* that incorporates the measurement imprecision of survey data.

The analyses show that West European publics and party elites shared a common definition of both issue dimensions. Factoring in measurement error, the economic dimension exerts greater direct and indirect influences on party preferences than found in traditional OLS models, although the cultural cleavage has a substantial influence. The results demonstrate the complex pattern of contemporary electoral choice for both citizens and parties in European political systems.

### Methods for Studying Voting Choice in a Multidimensional Political Space

Like many other researchers, we see contemporary politics as structured by two (or more) dimension of broad policy competition (Kitschelt 1994; Benoit and Laver 2006; Kriesi et al.

2008; Bakker et al. 2012; Rohrschneider and Whitefield 2012; Thomassen 2012; Dalton 2018; Norris and Inglehart 2018). The economic cleavage includes debates about the state's appropriate role in managing the economy, taxation levels, the provision of basic social welfare benefits, and problems related to income inequality. These issues contrast the advocates of an activist state that promotes the social welfare of the citizenry and regulates the economy against those who favor a limited economic role for the government and individualism. The specific issues of economic competition may vary from election to election reflecting immediate economic and social conditions, but they are connected to an underlying economic issue cleavage.

Another major aspect of political contention involves the issues underlying the cultural cleavage. Modernity is a positive force for social change, making contemporary societies more tolerant, more socially consciously, more enlightened, more peaceful, and more democratic (Welzel 2013; Inglehart 2018). Europeans today are more liberal on matters of gender equality, minority rights, religious norms, and LGBTQ rights than a generation or two ago. However, as progressive political views spread through society, they evoked reactions by those who favor the status quo or question some of the changes occurring around them. Thus, increasingly parties and voters differentiate their positions in terms of a cultural policy dimension (Kriesi et al. 2008; Hooghe and Marks 2017; Dalton 2018; Norris and Inglehart 2018).<sup>1</sup>

Thinking of electoral choice as a competition in a multidimensional space creates an analytical challenge since voting implies a simultaneous judgment of parties on multiple dimensions rather than one over-arching dimension.<sup>2</sup> A further complication is the desire to merge both individual and contextual factors that may shape voting choice across nations. The impact of voters' economic opinions, for example, may be influenced by national economic conditions. Thus cross-national electoral studies have advanced to the point where simple ordinary least squares (OLS) regression models and related variants are insufficient to capture a multidimensional competition.

A first methodological advance was the development of discrete-choice models in the 1990s to study voting choice cross-nationally. The most often used methods are multinomial logit (MNL), conditional logit (CL), and various probit models. This family of methodologies is often described as regression models for nominal-level dependent variables (Macdonald, Listhaug, and Rabinowitz 1991; Whitten and Palmer 1996; Alvarez and Nagler 1998). These methodologies were and are widely used in studies of issue voting (e.g., Alvarez, Bowler, and Nagler 2000; Vowles and Xezonakis 2016), economic models of voting (Duch and Stevenson 2010), social cleavages and voting (Knutsen 2018), and other voting models.

However, the logit/probit approach has limitations.<sup>3</sup> The nominal coding of parties lacks an explicit measure of the parties' actual policy positions. It relies on voter demands—issue opinions and party attachments to impute the supply of policy choices by the parties. In other words, only the characteristics of voters are treated as relevant for choice, not the stated policy positions of the parties. For example, analyses cannot determine whether cross-national variations in voters' support for Social Democratic parties occur because of differences in voter preferences or the policy profiles of the parties. Similarly, the impact of an issue cleavage may vary across nations, but the methodology cannot determine whether this is because of the varying importance of the issue to voters, or because the party choices on the issues vary (e.g., Häusermann and Kriesi 2015). Both voter preferences and party positions need to be considered as part of the calculus of voting.

Cees van der Eijk and his colleagues proposed an alternative utility model (van der Eijk et al. 2006). Instead of simple dichotomies to identify parties, they used a “utility value” for each party as the dependent variable on the assumption that voters select the party that has the highest utility for them. A party’s utility value is deduced by asking survey respondents to give their probability to vote (PTV) for each party in the election.<sup>4</sup> Their second innovation is to combine PTV scores for each party in an election into a single dependent variable by “stacking” respondents’ personal data and their PTV for each into a single data file. The number of cases thus equals the number of respondents times the number of parties. This allows researchers to model voter evaluations across all parties using modified OLS methodologies.

This method is valuable in describing the correlates of voting preferences and the influence of contextual factors across nations. It provides an indirect way to factor party positions into the statistical model. The PTV method has been used to study cross-national patterns of voting in European Union elections (van der Brug, Franklin, and Tóka. 2008), economic issues and the vote (van der Brug, van der Eijk, and Franklin 2007), candidate influences on the vote (van der Brug et al. 2008), and other topics.

However, other research has raised questions about this methodology. PTV scores indicate party preferences, but not the political positions of the parties. Do PTV scores reflect policy agreement, the appeal/rejection of party leaders on personalistic grounds, or the simple projection of the voter’s party identities (De Angelis and Garzia 2013; Paparoa, De Sio, and Brady 2020)? Some have questioned whether PTV measures contain systematic biases in judging policy agreement (Grand and Tiemann 2013). The reliance on each voter’s PTV statements can also create substantial endogeneity issues since the relation between voting propensities and voting choices is almost deterministic (van der Eijk et al. 2006). As a utility measure, parties with a higher capacity to implement their policies, because of their electoral size or incumbency advantage, should receive higher scores. Moreover, cross-national comparisons cannot determine if variations in the correlates of vote choice reflect differences among voters or among the choice set of parties. Finally, the stacked data structure violates statistical assumptions of the independence of observations in ways that may influence the results. There are means to address these questions, but the adequacy of the solutions is uncertain.

Another approach combines comparable measures of both voter and party positions on policy issues to explicitly link voter demands and party supply. The first applications used the Left/Right scale as a summary of issue positions. Data from the Comparative Manifesto Project was used to calculate party Left/Right scores as dependent variables in multivariate models (e.g., Klingemann et al. 2007; Budge, McDonald, and Pennings 2012). Other projects used citizen perceptions of the parties’ Left/Right positions from the Comparative Study of Electoral Systems to extend this approach (e.g., Dalton and Anderson 2008; Klingemann 2009; Dalton, Farrell and McAllister 2011). However, these studies used only a unidimensional voting framework.

Several scholars have recently moved toward a multidimensional framework by using parallel surveys of citizens and party elites to explore the voter-party linkage in a two-dimensional space (Belchior 2013; Walczak and van der Brug 2013b; Dalton 2018; Norris and Inglehart 2018). Until now, however, this approach has used separate models of voter decisions for each issue dimension. For example, one model explains voter choice on the economic dimension; a second model explains voter choice on the cultural dimension. This is only a partial solution, however, because electoral competition in a multidimensional space cannot be accurately represented in two separate unidimensional models. Voters are making tradeoffs between party positions in both dimensions, and party positions vary across dimensions.

Other studies have used a distance measure—the difference between citizen positions and party positions—in a multidimensional space measured by surveys and party datasets (Bakker et al. 2018; Stoetzer and Zittlau 2020). This research has a foundation in earlier models of rational choice voting (Ordeshook 1986; Poole, Rosenthal, & Koford 1991).<sup>5</sup> While this represents an improvement beyond a unidimensional model of Left/Right choice, it also has limitations. Using total distances as a dependent variable shares the same limitation as the Left/Right and PTV approaches by summing separate dimensions into a single measure. Moreover, these analyses do not address the differential measurement error across issue dimensions for both citizens and parties and do not account for the correlation between these dimensions.

These previous studies have yielded insights into different elements of contemporary electoral choice, but they have done so by disaggregating the process of multidimensional choice into simpler methodologies. In other words, the separate unidimensional analyses or summated measures of voter party differences need to be integrated into a multidimensional model of voter choice that captures the voters' and parties' position on each dimension of the political space. This project's goal is to introduce a new method to study voting choice in a multidimensional space that explicitly measures voters' policy demands, the parties' supply of policy choice, and their relationships in making voting choices.

### **A New Approach**

To address the methodological challenges of voting choice in a multidimensional space, we utilize structural equation modeling. We begin by analyzing citizens' policy preferences in terms of broad issue cleavages—such as the economic and cultural dimensions—rather than discrete issues. Paul Goren (2012), for example, demonstrated a higher level of policy voting among the American public when multiple issues were combined into indices. Similarly, Ansolabehere and his colleagues (2010) argued that such multi-indicator methods are the most accurate way to tap citizens' public policy views and their voting impact.

We use confirmatory factor analysis to determine the dimensionality of the policy space and how well specific issues tap the underlying issue dimensions. The key assumption is that individual policy preferences are based on latent factors of an economic or cultural dimension. Single issue items or summary indices do not consider the measurement error inherent in survey data, and differential measurement error across items can easily distort the empirical results. The Structural Equation Method (SEM) provides for a measurement model of these latent issue dimensions. This measurement concern exists in assessing both voter positions and party positions on the two issue dimensions.

Then, we use SEM to model the link between voters' social characteristics and their issue dimensions, and the issue dimensions to their party choices. This requires an exceptional data source that has identical (or at least comparable) measures of issue positions for both voters and parties. In our case, we utilize the 2009 European Election Survey that polled both voters and party candidates, asking identical issue questions (see next section).

Modeling the multiple relationships between voter and party positions in a single model has several advantages. The SEM model allows us to include a correlation between the cultural and economic dimensions (for voters and parties) to identify the separation or overlap between the dimensions. More important, the SEM method allows us to *simultaneously model the direct effect* of voters' positions on both dimensions on vote choice defined by party positions on both dimensions. Also, the model can estimate cross-cleavage influences. For example, the voters'

cultural positions may indirectly influence the choice of parties on the economic cleavage.<sup>6</sup> Since the voting options are limited and voters' decisions are based on a two-dimensional space, a person's party choice most likely includes such cross-cleavage influences.

To summarize, we address the methodological challenges of party competition in two dimensions to provide a more comprehensive test for the underlying mechanism of voting choices. By testing the dimensionality of issues, we reduce the complexity of multiple issue indicators as well as accounting for measurement error. In addition, the structural model estimates the complex nexus between multidimensional constructs, not only on the voter, but also on the party side of the equation.

## **Data and Methods**

### ***Data***

We use two different data sources from the 2009 European Election Study (EES): the voter study and the survey of Candidates for the European Parliament.<sup>7</sup> These two surveys assess the cleavage positions of voters and elites. Furthermore, matching both datasets enables us to regress party positions on both issue cleavages on voters' characteristics. These data have been used in previous studies linking citizens and parties (Banducci et al. 2010; Costello, Thomassen, and Rosema 2012; Belchior 2013; Walczak and van der Brug 2013a; Dalton 2018), but without the methodological innovations presented here.

We focus on systems where the parties face the challenges of globalization, the financial crisis, cultural divisions, and other current controversies that are overlaid on an established party system. Thus, we limit the analyses to the EU 15 countries (minus 1).<sup>8</sup> Due to the low sample size of only eight CEPs, we dropped Ireland from our analysis. These are established democracies where party competition might be described by a two-dimensional space of economic and cultural issue dimensions. This results in an analytical sample of N=9466 individuals, nested in 14 countries.

The number of candidates per party varies considerably from one up to 51 respondents. While these numbers partly reflect the actual party size, they affect the measurement error for the elite mean scores. Therefore, we excluded parties with three or fewer candidates in the sample. Since the EP elections are often treated as second-order elections to signal political dissent, we examine citizens' national election vote intentions to provide a firmer measure of party loyalties. In total, we eventually merged information for 94 different parties into the voter study.

### ***Measurements***

To operationalize the issue cleavages, we used nine issues that were asked in the same way in the voter and elite samples. The survey asked respondents to rate the following statements on a five-point Likert type scale from 1 (*strongly agree*) to 5 (*strongly disagree*):

- 1) Immigrants should be required to adapt to the customs of [country].
- 2) Same-sex marriages should be prohibited by law.
- 3) People who break the law should be given much harsher sentences than they are these days.
- 4) Schools must teach children to obey authority.
- 5) Immigration to [country] should be decreased significantly.
- 6) Politics should abstain from intervening in the economy.
- 7) Private enterprise is the best way to solve [country's] economic problems.

- 8) Major public services and industries ought to be in state ownership.
- 9) Income and wealth should be redistributed towards ordinary people.

All items were rescaled so that a higher value reflects more conservative views. To identify the influence of social cleavage positions on issue positions and vote choice, we include a set of socio-demographic and attitudinal background variables in our models: gender, age, education, social class, and church attendance.<sup>9</sup>

## **Methods**

Our analytical strategy unfolds as follows: First, we focus on the measurement and dimensionality of political issues. We employ a series of (multilevel) confirmatory factor analyses and multi-group comparisons to test our expectations. Second, we estimate structural equation models to gauge the dimensional effect of issue views on party choice. Thus, we merge the public and elite samples. More specifically, for each respondent, we added the average issue scores of candidates for the respondent's party of choice, based on the multilevel confirmatory factor analysis. This creates a dataset from which we simultaneously estimate the measurement and structural model for parties and voters. Since electoral choice and especially the link to issue preferences is partially context-dependent, we need to account for cross-national variation. Therefore, a country fixed-effects approach controls for all variance at the national level. The relatively small number of nations would potentially lead to biased estimates in a multilevel setting, and moreover, the focus of our study is the individual level link. All models account for cross-national differences with country dummies. The models are based on robust full information maximum likelihood estimation for missing data as available in Mplus 8 (Muthén and Muthén, 1998-2012).

### **The Measurement of the Issue Space**

We began our research with a series of confirmatory factor analyses to identify the dimensionality in the policy views of European publics and then the Candidates for the European Parliament.<sup>10</sup> We estimated multiple group confirmatory factor analysis with countries as groups. The item-intercepts and error terms are allowed to vary across countries, but the factor-loadings are fixed to be equal. The coefficients, we report below are unstandardized, since the standardized coefficients vary based on the latent factor's variance across countries.

Table 1 presents the two-dimensional multiple group model for the citizen sample. The items *immigrant assimilation*, *same-sex marriage*, *harsh sentencing*, *obedience in school*, and *restrict migration* compose the cultural factor. The *private enterprise*, *state intervention*, *state ownership*, and *income distribution* items are linked to the economic factor. We find positive and significant factor loadings for all items on the respective latent variable. The fit of the two-dimensional model is modest, but it is a statistically significant improvement over a one-dimensional model.<sup>11</sup>

For the cultural dimension, the factor-loadings are rather strong to very strong across countries. The same-sex marriage issue is the possible exception, which may occur because national policies on this issue vary across Europe and thus the salience and meaning of this issue vary. For the economic dimension, the factor loadings are lower, while still significantly related to the latent construct. There is less common conceptual ground among those four economic indicators and less inter-item correlation. Furthermore, looking at cross-national variation, the



economic measurement is, in fact, problematic in some countries, which is probably the reason for the rather weak model fit indices.<sup>12</sup>

There is a positive correlation between both issue dimensions in our model. That is, more conservative economic views relate to more conservative views on cultural issues, across countries. While our results reveal that the factors are distinct, the correlation suggests that they are not fully independent of each other and a comprehensive test should consider them both.

**Table 1. A Two-Dimensional Model of Issue Cleavages**

<i>Issues</i>	<i>Voters</i>			
	<i>Coef.</i>	<i>SE</i>	<i>Coef.</i>	<i>SE</i>
Immigrant assimilation	.694	.015	**	
Same-sex marriage	.448	.018	**	
Harsh sentencing	.654	.016	**	
Obedience in school	.561	.016	**	
Restrict migration	.808	.016	**	
Private enterprises			.823	.108 **
State intervention			.284	.054 **
State ownership			.188	.025 **
Income redistribution			.119	.031 **
Chi <sup>2</sup> (df)	2138.37	2 (481)		
RMSEA			0.081	
AIC			198673.272	
CFI			0.755	
TLI			0.743	
SRMR			0.127	

*Source:* 2009 European Election Study, EU14 public sample.

*Note:* Table entries are results from a multiple groups confirmatory factor analysis.

Coefficients are unstandardized estimates. \*  $p < .05$ ; \*\*  $p < .01$ .

### ***Elite/Party Positions***

The other half of our voter-party dyad asks whether the dimensionality of political issues is mirrored among elites. The elite dataset constitutes a more complex data structure because we are ultimately measuring party positions based on candidates' responses. Most elite studies simply average party candidate scores to construct a party-level index. However, the

aggregation process potentially inflates the coherence of the individual-level responses. Therefore, we computed measurement models that capture the full data structure.

We specified a single multilevel confirmatory factor analysis with candidates nested within parties, and then additionally at the party level. We also allowed for correlations between the issue dimensions for both candidates and parties. This methodology can thus address the variance within and between parties. Table 2 presents the results for the two-factor multilevel measurement model. There is a good overall fit to the data.<sup>13</sup> Since the items are measured for individual CEPs, most of the measurement error exists at the candidate-level level as shown on the left side of the table. In turn, the loadings are substantially higher at the party level on the right side of the table. As for the voters, the loadings for the cultural dimension are stronger, with the same exception of the same-sex marriage issue. CEPs display stronger loadings than the public for the economic items.

**Table 2. The Two-issue Dimensions for Candidates and Parties**

<i>Issues</i>	<i>Candidates</i>				<i>Parties</i>			
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Immigrant assimilation	.579	.040			.988	.012		
Same-sex marriage	.373	.027			.848	.059		
Harsh sentencing	.536	.041			.936	.022		
Obedience in school	.487	.033			.934	.019		
Restrict migration	.640	.024			.926	.026		
Private enterprises			.674	.117			.958	.027
State interventions			.347	.059			.914	.025
State ownership			.395	.082			.905	.018
Income redistribution			.368	.070			.989	.014
Chi <sup>2</sup> (df)					181.200 (52)			
RMSEA					0.050			
AIC					24505.338			
CFI					0.907			
TLI					0.871			
SRMR <sub>within</sub>					0.048			
SRMR <sub>between</sub>					0.065			

Source: 2009 European Election Study, EU14 subset: candidates and aggregate party scores.

Note: Table entries are coefficients from multilevel confirmatory factor analysis. All coefficients are significant at  $p < .01$ .

The relationship between issue dimensions also displays the same overlap that we observed for the mass public. Among individual CEPs, there is a modest correlation between positions on the economic and cultural dimensions (.29). When aggregated to parties, the correlation increases substantially (.56). This is further evidence of the overlap in party liberal/conservative positions on both dimensions, especially in the party choices available to voters. Thus, these results indicate there is less measurement error and more clearly defined dimensions for CEPs than for the public, which is typical in mass-elite comparisons.

In sum, the structure of these political issues is two-dimensional and comparable between elites and voters. Political issues are measured with a considerable amount of measurement error, which might bias results if not built into the analyses. Furthermore, the dimensional structure is clearer for elites; for voters, the economic dimension is problematic. Cross-national differences are an additional factor in this complex picture. Nonetheless, we find that political competition is now divided into a two-dimensional space (at the least), with an economic and a cultural dimension.

### **The Supply of Party Choice**

Candidates for the European Parliament tend to be high-level elites within their respective parties. Many have served previously in the EP, and others have held national or local elected office. Therefore, their views can be treated as representative of party elite opinion and thus the parties' policy positions.

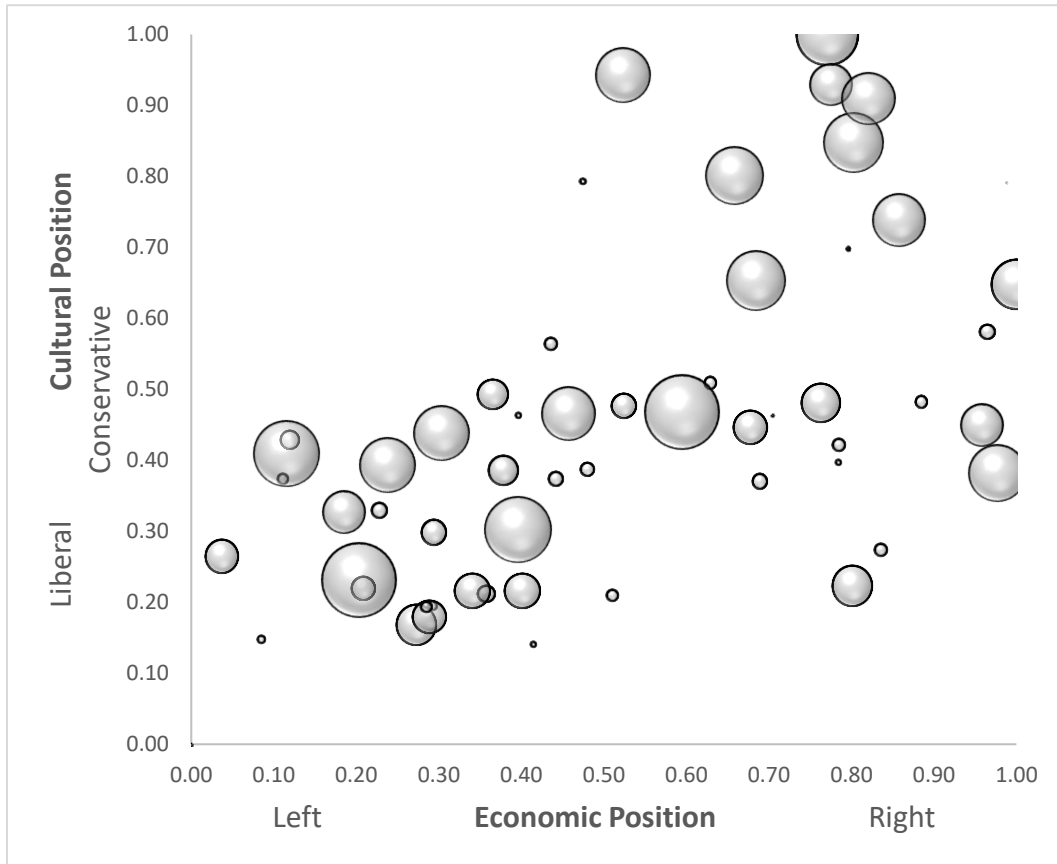
We used the party factor scores from the elite multilevel CFA models to calculate an average position for each party on the economic and cultural cleavages, normalized on a scale from 0 to 1. This process locates each of the parties in a two-dimensional political space. Figure 1 illustrates the distribution of parties in this space for all 14 nations. Higher values on each dimension represent a conservative position. The size of the circles is proportional to the parties' vote share.

Parties across the EU14 display a mix of positions on the cultural and economic dimensions. The pattern reflects Kitschelt's (1994) left-libertarian versus right-authoritarian axis. Most parties fall into the lower left quadrant of liberal positions on both dimensions or the upper right quadrant of conservative positions ( $r=.63$ ). This varies somewhat from other analyses of the European party space that statistically constructed orthogonal dimensions that dispersed parties in the space.<sup>14</sup> Even in our model, however, roughly a fifth of all parties fall in the off-diagonal quadrants reflecting a contrasting liberal-conservative mix, with some at a considerable distance.<sup>15</sup> Among the remaining parties, there is often a substantial difference in their positions on both dimensions. For example, a cluster of parties—generally liberal parties—hold very conservative economic positions and moderate to liberal cultural positions. Conversely, the elites of many reformed communist parties are economically very liberal but moderate on cultural issues. Thus, as other recent studies have shown (Bakker et al. 2012; Dalton 2018; Norris and Inglehart 2018), describing party competition along a single Left-Right axis does not capture the reality of contemporary party systems.

In a single nation, the choice set is defined by the party supply. British elections have only a few viable parties, while a wide variety of policy choices are available in several other nations. This may affect the pattern of voting choice across countries. Since our goal is to assess the overall impact of both issue dimensions for West European publics, combining nations

provides more diversity of choice sets so we can summarize the overall importance of both dimensions on electoral choices across varied institutional contexts.

**Figure 1: Party Positions on the Economic and Cultural Dimension**



Source: 2009 European Election Study, EU14 subset (N=94).

Note: Table entries are party scores on the economic cleavage and cultural cleavage; the size of each bubble reflects the party's vote share.

In summary, the existence of two clear dimensions of issue cleavages in contemporary politics has both theoretical and empirical implications. Theoretically, it argues that one-dimensional Left-Right models of party competition are insufficient in capturing political reality. Citizen views of cultural issues are strongly aligned, and similar structures exist for party elites; there is also a parallel citizen-elite structure for economic issues. Moreover, in the following analyses, we expect to show that both issue dimensions have strong and distinct effects on voting choice. The social choice literature has highlighted the complexity this creates for voters and parties. The proximate party choice is less obvious in a multi-dimensional space.<sup>16</sup> The optimal party choice on one cleavage might conflict with the optimal party choice on the other cleavage, even with many parties spread throughout the space. And instead of looking left and looking right for the adjacent policy choices, a multidimensional space means a 360-degree comparison which might lead to many possible choices. Diversity in choice is generally positive, but this adds to the complexity of choice.

A multi-dimensional space in two or more dimensions also creates a methodological challenge. Nearly all our basic statistical models were developed to explain a single dependent

variable, whether it was an interval/ordinal level scoring of party positions (multiple regression) or a nominal level categorization of parties (multinomial logistic regression). We described the limitations of such models in capturing the complexity of electoral choice. Research needs a method that models choice on both issue dimensions simultaneously and tries to maximize the fit on both dimensions jointly. The models also should estimate cross-paths and allow for potential correlations between the dependent variables. Furthermore, models should examine the mediating process of socio-demographic background variables on political choice, via issue orientations. This is why we utilize structural equation models.

### **The Causal Process of Voting**

An accurate voting analysis should explicitly consider the tradeoff a citizen faces in judging between a party's economic position *and* its cultural position as voters make their choice. We assume that most voters will try to maximize total proximity to the chosen party if both cleavages are weighted equally. But nearly all prior analyses have examined both issue cleavages separately, rather than as a two-dimensional simultaneous choice. The best-fit party on the economic cleavage may not be the best fit for the cultural cleavage, so how do voters make this tradeoff? And are choices on each dimension linked? These questions are the rationale for our use of structural equation modeling

Structural equation models have several distinct advantages over traditional regression models. First, we directly consider the accuracy of measurement of each issue dimension, rather than ignoring measurement issues. As we have seen, the EES data suggest a more well-defined measurement of the cultural dimension than the economic dimension. Second, we can simultaneously model the effects of both issue cleavages on vote choice as a two-dimensional choice process. This aspect of the model can also include correlations between issue cleavages to better represent the voters' decision-making process. Third, we include the socio-demographic influence on citizen issue positions to identify the social bases of each issue dimension.

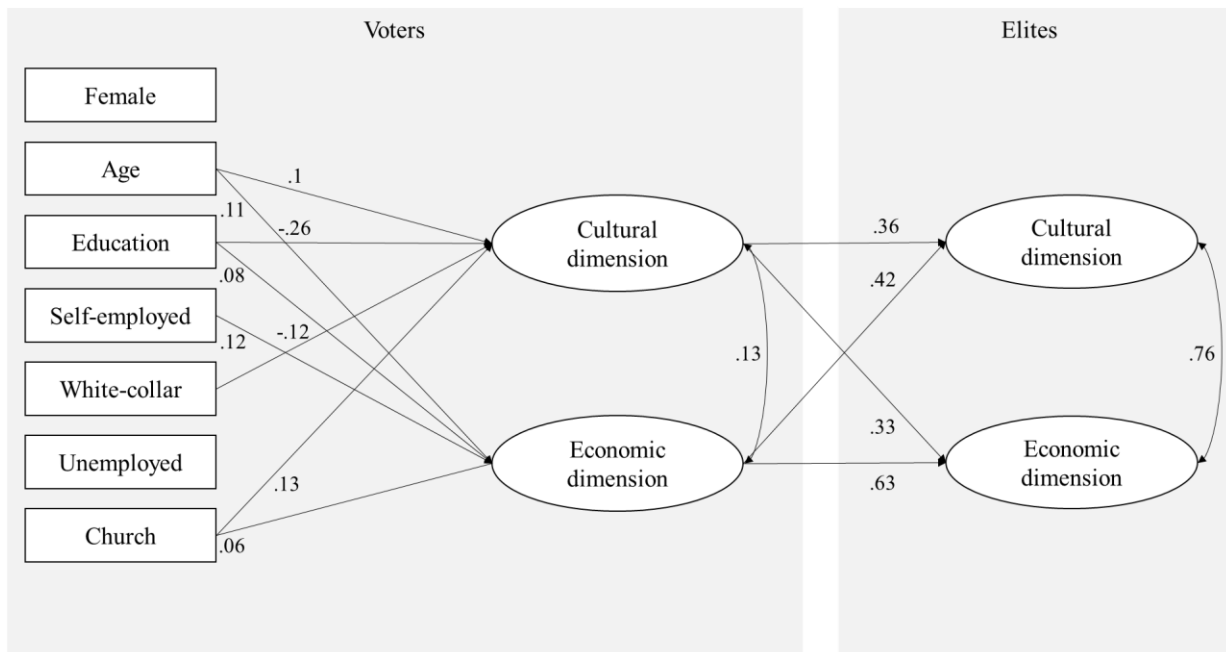
Figure 2 summarizes the main effects of our structural equation model. The rectangles represent observed variables, that is, socio-demographic traits. The ellipses indicate latent variables. The indicators for the latent variables are not shown (see tables 1 and 2). The arrows between the shapes are the standardized regression coefficients and the double arrows depict correlations. We present the results in line with our causal logic of the underlying mechanism.

The Lipset-Rokkan (1967) theoretical framework argues that issue positions reflect existing social divisions in a nation, and this applies to the two issue dimensions we are studying (Kriesi et al. 2008; Knutsen 2017; Evans and Tilley 2017; Dalton 2018). The economic cleavage should be predictably linked to socio-economic status, with the middle class favoring conservative positions and the working class (or unemployed) leaning toward liberal positions. For the cultural cleavage, previous studies have shown that liberal positions are held by the young and better-educated strata of society. Conservative cultural positions are typically more common among older cohorts and more religious citizens.

The left side of the figure lists the socio-demographic variables included in the SEM.<sup>17</sup> The results generally match prior expectations and further validate the importance of both issue dimensions. The self-employed hold conservative economic opinion ( $\beta=.12$ ), compared to the working class which is the reference category. The higher educated ( $\beta=.08$ ) and older respondents ( $\beta=.11$ ) are also modestly linked to conservative economic positions.

The realignment of social groups is also evident for the cultural cleavage. Here, the better educated ( $\beta=-.26$ ) and white-collar respondents ( $\beta=-.12$ ) support a more liberal position on cultural issues. This shift of professionals and other upper-status groups toward cultural liberalism has been a driving force for policy change (and party realignment) as seen across Europe (Häusermann and Kriesi 2015; Evans and Tilley 2017). Age ( $\beta=.10$ ) and church attendance ( $\beta=.13$ ) predictably increase conservative cultural views. Surprisingly, gender did not display a significant independent relationship to either issue dimension, which suggests both dimensions cut across gender lines. In sum, despite its supposedly recent development, the cultural cleavage taps orientations that are socially embedded at least equally as the economic dimension.

**Figure 2: Cleavages to Issues to Party Choice: The Full Model**



Source: 2009 European Election Study, EU14 merged sample.

Note: Figure entries are standardized coefficients from SEM analyses. The figure displays paths and coefficients that are significant at  $p<.05$ .

The next stage of the model directly links voters' issue positions to party choice measured on both cleavages. The strongest direct effect is between voters' economic position and voting for a party with compatible economic positions ( $\beta=.63$ ). This is evidence of the persistence of the historic economic cleavage in European party systems that is somewhat masked in previous studies that did not adjust for measurement error or that examine voting choices for only one party family (such as the literature on far-right party voting). By comparison, voters who are culturally more conservative show a significant albeit weaker tendency to vote for a culturally conservative party ( $\beta=.36$ ). Once the more robust measurement of the cultural dimension is considered, the impact of this cleavage moderates compared to the economic cleavage.

The research significance of this new methodological approach shows in comparing these results to prior analyses of the same 2009 EES. For example, Walczak and Wouter van der Brug

(2013b) found that cultural issues had a much stronger relationship with party Left-Right agreement than economic issues. Even more directly relevant, Dalton (2018, ch. 7) separately modeled party preferences on the economic and cultural dimensions using simplified voter/party measures similar to those used here. His analyses implied that the cultural issue dimension was a stronger predictor of party preferences than the economic dimension and that this imbalance increased further in the 2014 European elections. Similarly, Norris and Inglehart's (2018, ch 8) analyses of support for populist parties using the European Social Surveys discounted the importance of economic positions and stressed the role of cultural issues

These contrasts to our findings, we believe, are almost entirely due to the more statistically accurate SEM model. The four economic items in the 2009 EES are a less robust measure of the underlying issue dimension for both citizens and party elites when compared to measurement on the cultural dimension (Tables 1 and 2 above). Thus, the estimation of economic effects likely suffers in analyses that do not factor in the differential measurement of dimensions. Separating economic choice and cultural choice into separate OLS regression models also does not capture the full complexity of multidimensional political choice.

The SEM model also uncovers significant cross-effects from voters' economic dimension to the party cultural dimension and vice versa. These links represent a trade-off in a discrete choice perspective. That is, the voters choose only one party, but this choice is based on the party's position in two dimensions. Conservative voters on one dimension tend to choose a party that is conservative on the other issue dimension independent of the voter's own issue position. This appears to further increase the impact of economic issues. The choice of parties on the economic dimension is mostly determined by individual economic positions ( $\beta=.63$ ). In contrast, party choices on the cultural dimension are almost equally based on their cultural issue preferences ( $\beta=.36$ ) and their economic views ( $\beta=.42$ ). This is further evidence that economic positions directly and indirectly affect voting choices in 2009 more than cultural positions.

These results also support previous findings focusing on a representation gap for left-authoritarian voters (Lefkofridi et al. 2014). While representation differentials along the economic dimension are based on decades of experience, the fit along the cultural dimension is rather novel with radical right parties recently representing these views (Oesch and Rennwald 2018; Arzheimer and Berning 2019). Furthermore, party elites are very strongly polarized in their economic positions and tend to over-represent their electorate. For example, we found that communist and post-communist parties are more extreme than their voters; the same applies to far-right parties. Our findings thus suggest that previous studies may have underestimated the persisting effects of individual economic views by not accounting for measurement error and modeling multidimensional party choice.

Finally, we considered the possible effect of socio-demographic traits on vote choice beyond issue cleavage opinions; that is, the direct effects of socio-demographics that are not fully mediated via individual economic and cultural issue positions.

Table 3 presents the results for indirect and total effects. The indirect effects are the product of all paths that link socio-demographics with vote choice mediated by cleavage positions. The total effect is the sum of all links between the socio-demographic background variables and vote choice for the respective cleavage. All these coefficients are based on the single model presented in Figure 2. If the size of the indirect and total effects are relatively equal, most if not all of the underlying process can be attributed to the individual cleavage position. Measures of social class affect voting decisions mostly via individual cleavage positions. The effects are more comparable across both dimensions since the indirect effect present here combines all potential paths that lead to the dependent variable. However, the educational, and

the white vs. blue-collar divide is especially important for a vote choice on the cultural dimension.

**Table 3. SEM Estimates of Voter Choice**

<i>Indirect/ Total effects</i>	<i>Cultural Dimension (Elites)</i>				<i>Economical Dimension (Elites)</i>			
	<i>indirect</i>		<i>total</i>		<i>indirect</i>		<i>total</i>	
<i>Items</i>								
Male			<i>Ref.</i>				<i>Ref.</i>	
Female	-.020	*	-.045	***	-.027	*	-.031	**
Age	.081	***	.037	**	.102	**	.068	***
Education	-.060	***	-.063	***	-.034	*	.003	
Blue-collar			<i>Ref.</i>				<i>Ref.</i>	
Self-employed	.041	***	.041	***	.066	***	.064	***
White-collar	-.024	*	-.018		-.011		.001	
Unemployed	.006		.027	*	.013		.001	
Church attendance	.069	***	.131	***	.077	**	.152	**
Country dummies			Yes				Yes	
Log likelihood					-99644.922			

\* p < .05; \*\* p < .01; \*\*\* p < .001

*Source:* 2009 European Election Study, EU15 merged sample.

*Note:* Table entries are results from confirmatory factor analysis.

### The Implications for Electoral Choice

Although there is an emerging consensus that political competition in established democracies is now best represented by a multi-dimensional space rather than the traditional Left/Right framework, the statistical modeling of the multidimensional relationships between voters and party choice remains mired in a one-dimensional statistical framework. This study addresses the multiple methodological challenges and provides a more comprehensive test of electoral forces in the current European political space. Empirically, we use the mass and elite surveys from the 2009 European Election Study for EU-14 member states. Methodologically, we combine confirmatory factor analysis and structural equation modeling to analyze voting choices.

Our substantive question is the subject of many years of scientific debates, but the analytical challenges of the underlying multidimensional relationships have not been addressed successfully in previous research. The previous methodological advances such as PTV, MNL, or CNL modeling only covered part of the problem. And for the most, these methods only modeled the dimensions separately, in sequential models. With our SEM approach, we combine the path



dependency, the simultaneous assessment of party positions, and further account for the measurement error of issue dimensions.

The results provide additional evidence for the two-dimensional structure of political issues in contemporary European politics. On the voter side, a diverse set of issues form a broad cultural dimension. Furthermore, the composition of this dimension is relatively equal across nations. A set of standard economic issues form a less structured economic dimension with greater measurement variance across nations. In other words, ignoring relative measurement error can distort the results obtained by normal OLS modeling and comparable methods.

The overall measurement pattern is mirrored by our findings for the Candidates for the European Parliament. There is less measurement error for the elites in measuring both issue dimensions. Especially for the economic dimension, candidates' views are much more coherent than those of the general public.

The SEM yields several valuable insights into electoral choice. First, there is a tension between theory and method in the definition of the partisan space. Herbert Kitschelt (1994) made the initial observation that a left-libertarian versus right-authoritarian dimension merges the two dimensions into a semi-unidimensional space. Yet, many of the recent empirical analyses have utilized methodologies with orthogonal dimensions that treat party positions on the dimensions as theoretically unrelated. Our confirmatory factor analysis yields an empirical answer to this question. The unconstrained CFA model finds a correlation between party positions across dimensions, which produces a space as seen in figure 1. Forced orthogonal solutions would produce more dispersion of parties in the space. In short, there is a theoretical and political implication in which methodology is used in identifying issue dimensions.

Second, although sometimes called a new political cleavage, the cultural dimension has substantial links to social characteristics, such as education, occupation, and church attendance. However, the patterns of these relationships often differ from the traditional Left/Right alignments. The cultural dimension represents a tug-of-war between progressive social groups and groups that emphasize traditional cultural values. For example, traits such as white-collar occupation and education are strong predictors of liberal cultural positions, while some of these patterns are reversed on the economic dimension. This is a sign of a realignment in European issue competition.

Third, we found that voters' positions on each of two issue cleavages strongly influence party choice along the two issue dimensions, especially for the economic cleavage. Furthermore, there are cross-over effects; voters' economic positions also influence party choice on the cultural spectrum and vice versa. The stronger cross-over effects for the economic dimension suggest that party choices are more dependent on economic issues than on cultural issues, although both have significant effects. This is another sign of the realignment of European party systems as both issue dimensions interact in determining electoral choices.

Fourth, the model shows that the parties are more equally distributed along the economic dimension. However, our models further show that the economic dimension is less firmly structured for the public, and in some countries rather problematic. Accounting for measurement error substantially affects the estimated correlates of vote choice. Thus, previous research may have underestimated the effects of the economic dimension.

The results presented here do have some limitations. Admittedly, we only provide cross-sectional evidence. Electoral competition is certainly a longitudinal process, and we cannot make strong causal claims about longitudinal change. We, therefore, encourage future research to incorporate the rationale presented here into a longitudinal perspective. In addition, the

application of structural equation models to pooled data from voters and party elites pushes the methodological frontier of electoral research. We explored alternative measurement models to address the statistical demands of structural equation models, and to produce convergence in the estimation process. The robustness of such results deserves further evaluation with other electoral data<sup>18</sup>. Finally, the individual relationships between political views and party choice depend largely on party supply, and thus, will vary greatly across nations. We sought to highlight the commonality of the individual-level mechanism in affluent democracy, and therefore controlled for the cross-national differences with country dummies. Nonetheless, we believe that the relationships presented above are conditional on the national political space, such as the supply of party choice. This multilevel cross-national question deserves greater attention.

Ultimately, our results add to the empirical evidence that the structure of party competition and electoral choice has undergone a political realignment from earlier patterns. The political space is complex and voters are challenged with many issues. Especially radical parties leverage upon this complexity and use simple answers to increase party support. Our findings provide evidence that the relationship between voters and party elites is not that simple and that political alignment is sensible and very real.

### *Appendix*

The previous analyses show that the measurement of issue dimensions has substantial cross-national variation. To investigate the differences in a non-fixed setting further, we ran the two-factor model shown in table A1 for each country separately. The results are presented below and support what we find in the multiple group and country-fixed effects analyses. The loadings of the cultural dimension are almost identical across countries, but there are huge differences for the economic dimension. That is, the effects are not consistent in direction and significance across countries. Table A2 displays the overall fit of these models.

**Table A1: CFAs - Two-Factor Models by Country**

	Austria	Belgium	Denmark	Finland	France	Germany	Ireland	Italy	Luxembourg	Netherlands	Portugal	Spain	Sweden	United Kingdom
	<i>Coef.</i> <i>(SE)</i>	<i>Coef.</i> <i>(SE)</i>	<i>Coef.</i> <i>(SE)</i>	<i>Coef.</i> <i>(SE)</i>	<i>Coef.</i> <i>(SE)</i>	<i>Coef.</i> <i>(SE)</i>	<i>Coef.</i> <i>(SE)</i>	<i>Coef.</i> <i>(SE)</i>	<i>Coef.</i> <i>(SE)</i>	<i>Coef.</i> <i>(SE)</i>	<i>Coef.</i> <i>(SE)</i>	<i>Coef.</i> <i>(SE)</i>	<i>Coef.</i> <i>(SE)</i>	<i>Coef.</i> <i>(SE)</i>
<i>Cultural dimension</i>														
Immigrant assimilation	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)
Same-sex marriage	0.72*** (0.068)	0.43*** (0.110)	0.36*** (0.046)	1.41*** (0.160)	0.73*** (0.081)	0.70*** (0.067)	0.68*** (0.109)	0.92*** (0.097)	0.62*** (0.098)	0.35*** (0.056)	0.70*** (0.104)	0.74*** (0.106)	0.58*** (0.055)	0.73*** (0.087)
Harsh sentencing	0.96*** (0.066)	0.91*** (0.114)	1.05*** (0.073)	1.41*** (0.129)	0.92*** (0.078)	0.98*** (0.074)	0.84*** (0.105)	0.72*** (0.068)	1.17*** (0.120)	0.95*** (0.076)	0.58*** (0.071)	0.99*** (0.103)	0.79*** (0.058)	1.17*** (0.084)
Obedience in school	0.80*** (0.068)	0.84*** (0.102)	0.64*** (0.057)	0.95*** (0.099)	0.74*** (0.069)	0.92*** (0.074)	0.82*** (0.095)	0.87*** (0.081)	0.86*** (0.104)	0.62*** (0.061)	0.46*** (0.066)	0.92*** (0.100)	0.87*** (0.063)	0.87*** (0.064)
Restrict migration	1.29*** (0.074)	1.09*** (0.107)	1.15*** (0.072)	2.06*** (0.174)	1.38*** (0.097)	1.12*** (0.077)	1.31*** (0.147)	1.24*** (0.090)	1.52*** (0.138)	1.06*** (0.081)	1.04*** (0.109)	1.28*** (0.122)	1.04*** (0.066)	1.23*** (0.086)
<i>Economic dimension</i>														
State interference	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)	1.00 (.)
Private enterprises	2.45*** (0.494)	0.50*** (0.116)	2.61*** (0.582)	0.58*** (0.135)	2.08*** (0.432)	1.42*** (0.241)	0.15 (0.160)	1.77*** (0.363)	0.97*** (0.282)	2.22** (0.809)	0.35 (0.229)	4.65* (2.084)	17.22 (34.125)	0.99*** (0.180)
State ownership	0.91*** (0.157)	- 0.77*** (0.137)	0.96*** (0.236)	- 0.56*** (0.149)	1.34*** (0.300)	0.52*** (0.103)	-0.63** (0.210)	-0.25 (0.185)	-0.82** (0.283)	0.63 (0.350)	- 1.49*** (0.422)	0.65* (0.292)	19.97 (40.210)	0.00 (0.153)
Income redistribution	0.78*** (0.155)	-0.35** 0.111	0.17 (0.188)	- 0.45*** (0.122)	0.53** (0.194)	0.66*** (0.122)	- 1.01*** (0.246)	-0.51** (0.174)	- 1.08*** (0.305)	-0.23 (0.400)	- 1.54*** (0.466)	0.41 (0.276)	23.12 (47.542)	-0.17 (0.130)
Covariance	0.11*** (0.024)	0.18*** (0.035)	0.18*** (0.041)	0.17*** (0.025)	0.17*** (0.036)	0.14*** (0.027)	0.23*** (0.050)	0.18*** (0.036)	0.13*** (0.028)	0.07** (0.023)	0.11*** (0.029)	0.06* (0.028)	0.00 (0.007)	0.29*** (0.043)

**Table A2: Model fit**

<i>Model fit</i>	<i>Model</i>					
	Voter: one-factor	Voter: two-factor	Voter: cultural dimension	CEP: one-factor	CEP: two-factor	Full structural equation model
Chi <sup>2</sup>	2254.408	2138.372	701.918	642.351	181.200	41126.355
df	495	481	131	54	52	409
RMSEA	0.082	0.081	0.069	0.104	0.050	0.117
CFI	0.740	0.755	0.943	0.577	0.907	0.621
TLI	0.735	0.743	0.935	0.436	0.871	0.524
SRMR <sub>within</sub>	0.126	0.127	0.060	0.079	0.048	0.064
SRMR <sub>between</sub>	-	-	-	0.165	0.065	-
Factor loadings across countries	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed

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#### ENDNOTES

- <sup>1</sup> Other scholars have argued that European integration provides a third dimension of competition among EU nations (Hooghe, Marks and Wilson 2002; Costello, Thomassen, and Rosema 2012), or the content and number of dimensions might vary between Western and Eastern Europe (Rohrschneider and Whitefield, 2012)
- <sup>2</sup> We further doubt whether party competition every fully matched the Downsian unidimensional model, since class, religion and regional divisions have been a persisting feature in European party systems.
- <sup>3</sup> See the discussion of methodologies in Knutsen (2018, ch. 1).
- <sup>4</sup> This method was regularly used in the Dutch Parliamentary Election Studies beginning in 1982 and in the European Election Studies beginning in 1989.
- <sup>5</sup> The public choice perspective also focuses on the American case that is simplified by being a two-party system. The application to multiparty systems often shifts to dichotomous models for each party family, which does not explicitly measure party positions and avoids the central nature of the multiparty tradeoffs in voting choice (e.g., Bélanger and Meguid 2008).
- <sup>6</sup> For example, the literature on the consistency of Left/Right belief systems would suggest that Left/libertarian and Right/authoritarian positions would overlap for some voters/parties (Kitschelt 1994). One's initial economic liberalism might encourage cultural liberalism, for example.

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<sup>7</sup> We appreciate the assistance of Bernhard Wessel in providing access to candidate party affiliation, and to the principal investigators of the 2009 European Election Study for collecting and sharing these data sets. The GESIS archive in Cologne, Germany provided the datasets.

<sup>8</sup> Some of these same patterns are applicable to the post-communist democracies of Eastern Europe, but these nations are still institutionalizing their party systems and face other issues that are not well-represented in the EES surveys, such as foreign direct investment, establishing democratic institutions, legal reforms, etcetera (Rohrschneider and Whitefield 2018).

<sup>9</sup> Gender is a dichotomous measure (1 for female and 0 for male); age is measured in years; education is categorized as the age when the respondent stopped full-time education (1 for 0-15 years, 2 for 16 to 19 years, 3 for 20 years and more); social class is a simplified occupational classification (self-employed, white collar, blue-collar, and not employed). Blue collar occupation is a reference category in our models. We include church attendance as a measure of religiosity: “Apart from special occasions such as weddings and funerals, how often do you attend religious services nowadays?” Response categories were rescaled to range from 1 for never attend services to 6 for several times a week.

<sup>10</sup> The 2009 EES included three issues that are not used in this study: abortion policy, referendums for EU treaty changes, and whether woman should cut down on work for her family. Some of these issues fit the conceptualization of the cultural or economic cleavages. However, initial factor analysis shows that including these items led to non-convergence or model misfit.

<sup>11</sup> The model comparison are based on Santorra-Bentler corrected  $\chi^2$  values, since we use robust maximum likelihood estimation:  $\Delta X^2 = 105.66$ ;  $\Delta df = 14$ ;  $p = .000$ .

<sup>12</sup> The analysis specifies equivalent loadings across countries. This restriction significantly decreases the model fit ( $\Delta X^2 = 895.39$ ;  $\Delta df = 117$ ;  $p = .000$ ). We ran the measurement model separately for each country and find differences, especially for the economic dimension in factor loadings across countries (Appendix Table A1). We also ran a multiple group models, testing for measurement invariance for the cultural dimension only and the economic dimension. For the cultural dimension, we find a good fit to the data when factor loadings are fixed to be equal ( $\chi^2(131) = 701.918$ ;  $RMSEA = 0.069$ ;  $AIC = 205711.909$ ;  $CFI = 0.943$ ;  $TLI = 0.935$ ;  $SRMR = 0.060$ ). The interpretation of cross-national invariance should be taken with a grain of salt, because a  $\chi^2$  difference test reveals that the more restrictive model fits the data significantly worse than the baseline model, where loadings are allowed to vary. Using a multi-group comparison of the economic dimension to test whether we find the same structure in all countries leads to convergence problems. This further supports the interpretation that the economic dimension is not effectively measured across countries.

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<sup>13</sup> This also represents a significant improvement over a one-dimensional model ( $\Delta X^2 = 188.54$ ;  $\Delta df = 2$ ;  $p = .000$ )

<sup>14</sup> Other research has mapped the party space using orthogonal dimensions, which generates more dispersion of the parties in the two-dimensional space (e.g., Rohrschneider and Whitefield 2012; Dalton 2018; Norris and Inglehart 2018). We decided not to constrain the model to orthogonal dimensions and let the estimation model determine this empirically.

<sup>15</sup> Skewness measures indicate that the cultural dimension is more asymmetrically distributed compared with the economic dimension. In addition, the kurtosis is smaller for the economic dimension, indicating a more equal distribution.

<sup>16</sup> Donald Stokes seminal work on spatial voting similarly observed: “A troublesome problem in applying a more general model to the real world is that of defining some kind of distance function over all pairs of points [parties] in the space. The need for such a function is less acute in the one-dimensional case, because an approximate ordering of distances between points can be derived from the strong ordering of points in the space. However, the points of a multidimensional space are no longer strongly ordered, and it may not be possible to compare the appeal of two or more parties for voters located at a given point by measuring how far from the point the parties are.” (Stokes 1963, 371).

<sup>17</sup> The structural links between social background variables, personal views, and vote choice are likely context-dependent. The economic or more likely political situation of a country is very relevant to individual voting decisions. We included paths from country dummies to all endogenous variables, that is, individual and party cleavage positions. This allows us to control for all cross-national differences and sheds light on the individual level mechanism.

<sup>18</sup> One alternative would be to measure party positions using party expert data or voter advice applications and link these party measures to voter preferences in SEM models.