

Dimensions of Politics in the European Parliament

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Abstract

We investigate the dimensionality of politics in the European Parliament by applying a scaling method to all roll-call votes between 1979 and 2001 in the European Parliament. Contrary to most existing studies using these methods, we are able to interpret the substantive content of the observed dimensions using exogenous measures of national party policy positions. We find that the main dimension of politics in the EU's only elected institution is the classic left-right dimension found in domestic politics. A second dimension is also present, although to a lesser extent, which captures government-opposition conflicts as well as party positions on European integration.

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1. Introduction

In less than twenty years the European Parliament has evolved from a consultative body into the most powerful inter-state assembly in history. The European Parliament now has equal legislative power with the governments in many key areas, can amend many lines in the European Union (EU) budget, can veto the governments' nominee for Commission President, and can sack the Commission. Nevertheless, outside a small group of experts, the only directly elected European body remains relatively unknown.

Politics in the EU is different from traditional politics in democratic countries for several reasons. First, the EU is still more a supranational institution than a federal state. Second, there is considerable heterogeneity between the cultures, histories, economic conditions and national institutions of member states. Therefore, politics in the EU is likely to be more complex and multi-dimensional than national politics. Understanding the dimensionality of politics in the European Parliament should thus be an important step forward in understanding both the politics of the EU as well as how politics in other inter-state assemblies may develop.¹

One of the main ways of understanding politics inside legislative institutions is to investigate the shape of the policy space. The number of policy dimensions and the location of actors on these dimensions determine *inter alia* which actors are pivotal, the size of the winset, and hence the possibility and direction of policy change (e.g. Tsebelis, 2002). Not surprisingly, a fast growing area of political science research in recent years has been the estimation of actors' ideal points. This has taken a variety of forms and methods, such as scaling of roll-call voting data (Poole and Rosenthal, 1985; Poole and Rosenthal, 1997 Heckman and Snyder, 1997; Poole,

¹ Similar in spirit to what we are doing is the work by Voeten (2000) on the United Nations. Note that the European Parliament has considerably more formal legislative power than the UN General Assembly.

2000), hand coding of party manifestos (Budge et al., 2001), surveys of experts' opinions of parties' positions (Laver and Hunt, 1992; Huber and Inglehart, 1995), or computer coding of political statements (Laver, 2001; Laver, Benoit and Garry, 2003). The collection and dissemination of these spatial data has transformed several areas of political science and given them a stronger scientific empirical content.

The European Parliament is an especially interesting object of analysis because of its unique features. The European legislators are members of national parties but also of European party groups. Moreover, electoral districts do not transcend national borders, which means that Members of the European Parliament (MEPs) also represent their country. A legislature with such characteristics is potentially one with high dimensionality.

A first dimension that comes to mind is support or opposition to further European integration, a topic that has been the focus of much the literature on the EU (Tsebelis and Garrett, 2001; Marks and Steenbergen, 2002). In this interpretation of EU politics, actors prefer 'more' or 'less' European integration: with states like the Benelux more pro-European and states like the United Kingdom more anti-European. The European Parliament is generally seen as a unitary actor on the pro-European side. However, given that national politicians and national parties are represented in the European Parliament, the EU integration dimension might also play an important role in voting in this institution.

However, it has also been argued that as the EU increasingly makes policies in traditional areas of domestic politics – such as market regulation, social and environmental policies, and justice and interior affairs – we should expect a 'left-right' dimension to emerge in EU politics. There is dispute, however, as to whether the pro-/anti-Europe conflict will remain orthogonal to a general left-right dimension (Hix, 1999), will merge with the economic left-right dimension

(Hooghe and Marks, 1999; Tsebelis and Garrett, 2000), or will be subsumed within the ‘social’ or libertarian-authoritarian version of the left-right (Hooghe et al., 2002).

The existence of both an EU integration and a left-right dimension has been confirmed at the empirical level, in the positions national parties take on Europe (Marks et al., 2001; Aspinwall, 2002), in the European party federations’ election manifestos (Hix, 1999; Gabel and Hix, 2002), and in mass attitudes towards the EU (Gabel and Anderson, 2002). These two dimensions have also been observed in initial research on the policy space inside the European Parliament (Kreppel and Tsebelis, 1999; Hix, 2001; Noury, 2002) and the EU Council (Mattila and Lane, 2001; Mattila, 2004). However, existing research on the European Parliament has not investigated the full history of voting in the parliament since the first direct elections in 1979. As a result, any change in the number and content of dimensions over time has remained undocumented. Indeed, the European Parliament is an evolving legislative institution. Consequently, one may expect some variation in the number and content of dimensions.

We consequently describe the policy space inside the European Parliament by applying an established scaling method, Poole and Rosenthal’s (1997) NOMINATE algorithm, to all roll-call votes between 1979 and 2001 – over 12,000 votes by more than 2,000 MEPs. This method provides not only a measure of the dimensionality of the policy space, but also ideal point estimates on each policy dimension for every MEP since 1979. One weakness of this and similar inductive scaling methods is that the identification of the substantive meaning of the dimensions requires *post hoc* subjective interpretation. This is usually done by mapping vote divisions that split members orthogonally to the dimension of interest. Unfortunately, one cannot rely on existing techniques to confirm these heuristic interpretations. In this paper we seek to overcome this weakness of inductive scaling methods by explaining the substantive content of the observed dimensions through exogenous measures of actors’ policy positions, including expert judgments

of party placements and the coding of party manifestos. Our regression analysis enables us to understand what the dimensions of politics actually represent, and what changes in the content of the dimensions have occurred over time. This use of exogenous measures of actors' positions is novel and clearly more reliable.

We find one main dimension of politics in the European Parliament. This dimension is the classic left-right dimension of democratic politics. A second dimension is also present, although to a lesser extent. This dimension can be interpreted as the pro-/anti-Europe dimension. But, closer analysis reveals that the second dimension also captures inter-institutional conflicts between the political groups and national parties in the parliament and the parties in 'government' in the EU Council and Commission. Our analysis is robust to the use of other scaling methods.

The rest of the paper is organized as follows. Section two provides some background information on the European Parliament. Section three presents the results of the NOMINATE algorithm for the five elected parliaments since 1979. Section four presents the substantive interpretation of the dimensions revealed by this scaling method, using regression analysis. Section five concludes.

2. Parties and Politics in the European Parliament

Existing research on the European Parliament suggests that national parties are the primary principals of the Members of the European Parliament (e.g. Hix and Lord, 1997; Raunio, 1997; Kreppel and Tsebelis, 1999; Kreppel, 2001; Hix, 2002). National parties control the selection of candidates in European Parliament elections. European elections are fought mainly as separate

national, rather than European-wide, electoral contests (van der Eijk and Franklin, 1996). Once inside the European Parliament, national parties decide which European Parliamentary political group ‘their’ MEPs will belong to, which key committee positions and parliamentary offices their MEPs will seek, and which of their MEPs will get these positions.

However, once a national party’s ‘delegation’ has joined a political group, these MEPs face pressures from another principal: the leadership of the European political group. The political groups are the key agenda-setters in the European Parliament. They control the allocation of committee positions, finances, speaking time and the space on the legislative agenda. The leadership of each political group also controls the allocation of committee positions and resources between the national party delegations within the European party. The political groups issue voting instructions to their members, and employ ‘whips’ to ensure that their MEPs and national parties ‘toe the European party line’.

Nevertheless, the transnational parties are ultimately a product of national parties, who created and sustain the transnational parties to serve their own policy goals in the European Parliament. Without a government to support, that can threaten to dissolve the parliament and force new elections, the incentives for collective party organization in the European Parliament are weaker than in domestic parliaments (e.g. Huber, 1996; Diermeier and Feddersen, 1998). Nevertheless, transnational parties in the European Parliament help national parties and MEPs structure their behavior in much the same way as parties do in the US Congress (cf. Cox and McCubbins, 1993, and Kiewiet and McCubbins, 1997). Each national party is unlikely to obtain its policy objectives by acting alone. National parties could negotiate coalitions vote-by-vote. However, this would be costly in terms of time, and hard to enforce. As a result, national parties who expect to have similar preferences on a range of future policy issues can reduce the transaction costs of coalition-formation by establishing a transnational party organization. This

party organization constitutes a division-of-labor contract where ‘backbench’ MEPs provide labor and capital (working out the position of the party and gathering information on the issues on which they become specialized), and political group ‘leaders’ distribute committee and party offices, communicate party positions and enforce the terms of the party organization contract.

TABLE 1 ABOUT HERE

Table 1 shows the political parties in the European Parliament and their strengths after each of the five European elections. As the table shows, most MEPs have been members of political groups that are genuinely ‘transnational’, with members from most of the EU member states. These transnational parties broadly represent the policy positions of one of the classic European ‘party families’. However, throughout the history of the parliament, particular national parties have deliberately chosen to sit separately from these transnational parties, and to form what can be described as nationally-dominated groups: such as the groups that have been dominated by the French Gaullists, the British Conservatives, or the Italian Communists. The existence of these groups has declined over time. Most of the member parties from these groups have chosen to join one or other of the larger political groups as the main political groups have strategically altered the parliament’s Rules of Procedure to make it more difficult for nationally-based groups to be formed. Nevertheless, the existence of both transnational and national groups suggests some interesting characteristics about politics in the European Parliament.

First, the fact that most national parties have decided to join transnational political groups suggests that these aggregate agents expect that on most issues on the EU agenda their policy preferences will be closer to parties from the same party family from other member states than to parties from a different party family from their own member state. For example, the French and

Swedish Socialists expect to be closer on most issues than they will be to the French and Swedish Conservatives, respectively. If the opposite were the case, the French Socialists would have an incentive to form a transnational party organization with the French Conservatives, and likewise for the Swedish Socialists and Conservatives.

In other words, the predominance of party-based rather than national-based groups in the European Parliament suggests that the main observable dimension of conflict in the European Parliament should correlate with the dimension that distinguishes the European party families from each other in domestic politics: the left-right dimension, in its socio-economic (intervention-free market) as well as socio-political (liberty-authority) versions.

Second, national parties who established their own political groups expect that their policy positions will be sufficiently different from any of the transnational political groups to make it too costly to join any of these organizations. Hence, despite the expected dominance of party-family based divisions, at least some national parties in the European Parliament expect issues to split representatives along national rather than transnational lines.

So, the existence of some non-transnational groups in the history of the European Parliament, and the fact that national political parties remain the primary principals for the MEPs, suggests that we should also observe national conflicts on issues which are salient to particular member states, when some of the parties from these states can be expected to vote together rather than to follow the instructions of their transnational parties.

Existing studies of roll-call voting in the European Parliament find that MEPs are more likely to vote along transnational party lines than national lines (Attinà, 1990; Brzinski, 1995; Raunio, 1997; and Hix and Lord, 1997). Also, existing applications of scaling methods to voting in the European Parliament suggest that the main dimension of conflict is the left-right (Kreppel and Tsebelis, 1999; Hix, 2001; Noury, 2002; Noury and Roland, 2002). However, these results

are derived from samples of votes in particular periods and there are no studies of the evolution of the conflicts and the relative location of parties and MEPs over time.

It is also worth mentioning the place of the European Parliament in the EU's legislative process. The European Commission has exclusive rights to initiate legislative proposals. However, given the high voting hurdle in the Council (unanimity or a qualified-majority), the Commission rarely initiates proposals that are not expected to win approval in the Council (Tsebelis, 1994, 2002). The role of the European Parliament has usually been more passive than that of the Council. The European Parliament has a lower voting hurdle (mostly simple majority) and its role was mostly consultative in the early years. The European Parliament therefore had no real agenda-setting powers. However, reforms of the EU treaties have given the parliament increased powers to shape the content of legislation.

3. Establishing the Dimensions of Politics in the European Parliament

There are three types of votes in the European Parliament. In the first two types, the 'show of hands vote' and the 'electronic vote', how each MEP votes is not recorded. In the third type, 'roll-call votes', how each MEP votes (Yes, No, or Abstain) is published in the parliament's official minutes. Only certain votes are required to be taken by roll-call, but a political group or at least thirty-two MEPs can request any vote to be taken by roll-call. Roll-call votes represent approximately one-third of all votes in the European Parliament and there is evidence that roll-calls have been held on some issues more than others, at least in the fifth parliament (Carrubba et al., 2004). Nevertheless, studying roll-call voting behavior allows us to understand how MEPs vote when votes are held in public. It is worth noting that the number of roll-call votes has

increased as the powers of the parliament have increased: from 886 in the first directly-elected parliament (1979-1984) to 3,739 votes in the fourth parliament (1994-1999), and 2,124 in the first half of the fifth parliament (July 1999 to December 2001).

We collected and coded all roll-call votes in the European Parliament from the first plenary session after the first direct elections, in July 1979, to the last plenary session in the first half of fifth elected parliament, in December 2001. We then applied a standard method for extracting ideal point estimates from individual vote decisions in roll-calls: the NOMINATE scaling method (Poole and Rosenthal, 1997: 233-251). This method has been applied with great success to the U.S. Congress (*ibid.*), and has recently begun to be applied to other voting environments with multiple players and multiple decisions, such as the United Nations (Voeten, 2000) and other parliaments (e.g. Rosenthal and Voeten, 2004; Schonhardt-Bailey, 2003).

We include all Members of the European Parliament in this analysis. The number of MEPs in each parliament changes because the European Parliament expanded from 410 members in 1979 to 626 members in 1999 with the enlargement of the EU from ten to fifteen member states in this period. The number of MEPs we can estimate also varies as some parliaments had a higher replacement rate of sitting members than others. In addition, following the standard practice in the scaling of legislative votes, we discarded MEPs who voted in fewer than ten roll-call votes in a given parliament and dropped votes where more than 97 percent of MEPs voted together. The number of MEPs discarded using this method was actually rather small (ranging from 9 percent of the 548 MEPs who were present at one time or another in the first parliament to less than 1 percent of the MEPs in the fourth parliament) and these discarded MEPs did not belong to any particular member state or political group. Table 2 lists the number of scaleable roll-call votes and legislators we were able to estimate in each European Parliament.

TABLE 2 ABOUT HERE

Table 2 also compares two goodness-of-fit measures of applying NOMINATE to the European Parliament with other assemblies. The first measure is the percentage of roll-call vote decisions correctly predicted by the set of legislator locations on the first and second dimensions. The second measure is the aggregate proportional reduction in error, which indicates how much the spatial model improves on a naïve benchmark model, such as everybody voting the same way in each vote. The first thing to note from these findings is that NOMINATE produces one main dimension of voting in all these cases. Nevertheless, we find that voting in the European Parliament is more multidimensional than in other parliaments. This can be seen from the magnitude of the goodness-of-fit statistics for the second dimension in the European Parliament compared to the other parliaments. The results also reveal, though, that voting in the European Parliament has become increasingly one-dimensional.

Figures 1a to 1e show the ‘maps’ produced by NOMINATE, where each dot represents the estimated location of each MEP on the first two dimensions. Before interpreting these figures, it is worth bearing in mind that what this scaling method does is ‘discover’ the main orthogonal dimensions of voting behavior. This method does not provide any substantive meaning of these dimensions. In fact, as with other scaling techniques, the dimensions discovered by NOMINATE might capture a mix of underlying issue-based or interest-based dimensions of conflict.

FIGURES 1a-1e ABOUT HERE

The location of the political groups in these figures nevertheless suggests that the two dimensions of politics in the European Parliament are the left-right and pro-/anti-Europe dimensions. On the first dimension, in all five parliaments the parties are ordered from left to right exactly as one would expect with only a cursory knowledge of party politics in Europe: with the Radical Left and Greens on the furthest left, then the Socialists on the center-left, the Liberals in the center, the European People's Party on the center-right, the British Conservatives and allies and French Gaullists and allies to the right of the European People's Party, the Extreme Right on the furthest right, and the Anti-Europeans divided between some MEPs on the extreme left and some on the extreme right. Also, the figures suggest that the second dimension may be related to party positions on European integration, with the main pro-European parties (the Socialists, Liberals and European People's Party) at the top of the figures, and the main anti-European parties (the Radical Left, Greens, Gaullists, Extreme Right and Anti-Europeans) at the bottom.

Interestingly, the British Conservatives, who changed position dramatically on the question of Europe, move from the top of the second dimension in the first and second parliaments to near the bottom of this dimension in the fifth parliament – as the outlying group of MEPs in the European People's Party in the bottom right hand corner of Figure 1e.

These maps also confirm the two main trends in voting behavior in the European Parliament since 1979 revealed using other methods (e.g. Hix et al., 2005). First, all the political groups have become more cohesive, as illustrated by the declining dispersion of the positions of the MEPs in each political group across the five parliaments. In Hix et al. (2005), we had shown, using forms of agreement indices, that cohesion of European party groups had increased despite an increase in the ideological diversity among the national parties forming the European party groups. Second, in terms of the structure of the party system, there is a clear difference between the first three parliaments and the fourth and fifth parliaments. In the first three parliaments, the

party system was split into two blocs: a left bloc (of Socialists, Radical Left and Greens), against a right bloc (of the European People's Party, Liberals, French Gaullists and allies, and British Conservatives and allies). However, the fourth and fifth parliaments reveal a different party system. In this new system, the Liberals occupy a position between the Socialists and European People's Party.

4. Explaining the Dimensions of Politics in the European Parliament

4.1. Variables

Table 3 shows the correlations between the positions on the two dimensions of the individual MEPs who served in consecutive parliaments. What we observe is that correlations are very high for the first dimension and somewhat lower, although still high, for the second dimension. The stability of these dimensions over time suggests that the dimensions capture some substantive aspects of politics in the European Parliament. Note that the correlation coefficients are higher than Poole and Rosenthal (1997) report for the US Congress. These coefficients are especially high considering that the European Parliament has a five-year term whereas the US Congress has a two-year term.

TABLE 3 ABOUT HERE

To interpret the substantive content of the dimensions we use a series of statistical models to explain the location of MEPs as a function of exogenous national party positions and other factors. We define the dependent variables as the mean position of each national party's group of

MEPs on each dimension in each parliament. That is, we treat each national party's delegation of MEPs in each parliament as a separate observation. We use national parties as the unit of analysis for two reasons. First, exogenous measures of policy positions of actors in the European Parliament only exist for national parties. No comparable measure of the policy preferences of individual MEPs exist for all five parliaments. Second, as we explained above, national parties are the main aggregate actors in the European Parliament below the level of the transnational political groups, and have a powerful influence on the behavior of their MEPs. Individual voting behavior will thus strongly be determined by national party positions. Despite this aggregation, we still have enough data to perform a meaningful and serious econometric analysis. There were 57 national parties in the first directly-elected parliament (1979-1984), 73 in the second parliament, 85 in the third, 103 in the fourth, and 119 in the fifth. Consequently, we have 437 observations in the pooled analysis. However, we do lose a number of observations as a result of missing data on national party policy positions.

We have three types of independent variables. First, as policy variables, we use exogenous measures of national party positions on the left-right axis and on the pro-/anti-Europe axis. We test the hypothesis that the policy space in the European Parliament combines these two underlying policy dimensions. We use the two most widely applied exogenous measures of national party positions: from expert judgments of party locations, and from the content analysis of party manifestos. Both these measures are fully exogenous and therefore lead us to an independent interpretation of the policy dimensions rather than a purely subjective interpretation. We use these two measures as complements, since neither method is perfect. The expert judgments data for party locations before the 1990s are based on retrospective evaluations of party positions. Meanwhile, the party manifestos-based measures of party positions on EU

integration are potentially unreliable because of the small proportion of each manifesto dedicated to this issue.

The expert judgments data are taken from Marks and Steenbergen's (2004) dataset of party positions in 1984, 1988, 1992, 1996, and 1999. These five time-points correspond broadly with each of the five directly-elected European Parliaments, and so allow us to have parliament by parliament external measures of party positions. We call these variables *Left-Right (Exp)* and *EU Integration (Exp)*.

The party manifestos measures are taken from the Manifestos Research Group dataset. We use the standard EU integration measure in the dataset, where the percent of statements in each manifesto that are 'anti' European are subtracted from the percent of statements that are 'pro' European. We use three measures of left-right positions that have been constructed by Budge et al. (2001): the general left-right scale from the dataset, which combines manifesto statements on economic as well as social issues (*Combined Left-Right (Man)*); the scale constructed from party positions on social issues, such as environmental protection, gender equality, abortion, gay rights, and peace (*Social Left-Right (Man)*); and the scale constructed from party positions on unemployment, public spending, and state intervention in the economy (*Economic Left-Right (Man)*). By separating the combined left-right into these two sub-dimensions, we can test the claims about how economic preferences and social preferences shape EU politics. Since elections are held in most EU member states every four or five years, we have independent observations of the manifesto positions of almost all national parties in each of the five directly-elected parliaments.

We expect exogenous left-right policy positions to explain national party ideal point estimates on the first dimension, and exogenous pro-/anti-EU policy positions to explain national

party ideal point estimates on the second dimension regardless of whether these measures are based on expert judgments of party positions or the coding of party manifestos.

Second, to capture the effect of government-opposition dynamics at the national and European levels, we use two measures: (1) whether a national party was in government during the relevant parliament (which takes the value 1 if the national party was in government for a majority of the period and 0 otherwise), and (2) whether a national party had a European Commissioner during the relevant parliament (which takes the value 1 if the national party had a Commissioner for the whole period of the parliament, .5 if the national party had a Commissioner for approximately half of the period of the parliament, and 0 otherwise). Following our theory, we expect these variables to be significant on the second dimension but not on the first.

Third, to examine whether policy positions and government-opposition dynamics explain differences in voting not only between but also within the political groups, we estimate separate models with dummy variables for each political group. Likewise, we introduce dummy variables for each EU country, to analyze whether member state affiliation influences voting in the European Parliament. Descriptive statistics for all the variables are reported in Table A1 in the Appendix.

We first assume that there is no change in the content of the dimensions over time and perform a pooled analysis. The advantage of the pooled analysis is that by having a large number of observations the estimates of the relationships are more precise. In the pooled analysis we introduce dummy variables for each parliament (except the first) as control variables. We then perform parliament by parliament analysis. This allows us to investigate whether the content of the dimensions has changed over time.

4.2. Results

Table 4 shows the results from the pooled analysis for the first dimension. Five noteworthy findings need to be emphasized. First, as observed in the maps of the parliaments, MEP locations on the first dimension are explained by left-right policy positions. To evaluate the substantive effect of left-right policies on this dimension, it is useful to calculate standardized beta coefficients. The results show that a one standard deviation change along the left-right dimension (as measured by expert judgments) corresponds with a 78 percent standard deviation change on the first dimension.² The relationship between left-right positions and locations on the first dimension hold regardless of whether left-right positions are measured using expert judgments or party manifestos data. Moreover, economic as well as social aspects of the left-right dimension are significant. In other words, the main observed dimension of voting in the European Parliament is the same as the main dimension of domestic politics in Europe.

TABLE 4 ABOUT HERE

Second, the left-right variable remains highly significant after the inclusion of party dummy variables. This indicates that left-right policy positions also explain variations in MEP positions within political groups. In other words, a national party that has a policy position to the left of the average member of a political group will be revealed to vote slightly to the left of the average member of this group. Whereas difference between the political groups can be observed from the spatial maps, these differences within the EU political groups cannot be observed in the spatial maps but are clearly shown in the statistical results.

² Using the results in model 1 in Table 4.

Third, EU party policies and participation in government are only significant without party dummies. This means that once one controls for party positions these variables are not relevant explanatory factors on the first dimension.

Fourth, the magnitude of the coefficients on the political group variables confirms the intuition from the spatial figures: with the most left-wing parties having the lowest coefficients and the most right-wing parties having the highest coefficients.

Fifth, country dummies are generally not significant on the first dimension. Voting in the European Parliament is not driven by national interest.

Turning to the second dimension in Table 5, the main result emerging is that participation in government is always significant, regardless of the specification. More precisely, parties in government and who have Commissioners are located towards the ‘top’ of the second dimension. For example, as the spatial maps show, the Socialists and European People’s Party, who contain most of the main parties of government and have most of the EU Commissioners, are towards the top of the figure. The results in models 4-9 (with European party dummies) also show that participation in government explains positions on the second dimension within the political groups. Again, this result is not clear from the spatial maps alone.

TABLE 5 ABOUT HERE

The other main result is that the policy content of the second dimension is less clear than for the first dimension. EU policy positions and left-right positions, as measured by expert judgments, are significant in all specifications. However, the relationship between EU policy positions and location on the second dimension is stronger than the relationship between left-right dimensions and location on this dimension. More precisely, a one standard deviation change

along the EU integration dimension (as measured by expert judgments) corresponds with a 37 percent standard deviation change on the second dimension, whereas a one standard deviation change on the left-right dimension only corresponds with a 13 percent standard deviation change on this dimension.³ Note that EU policy positions, as measured by the party manifestos, are not significant in any specification. Moreover, the social and economic measures of left-right are not significant in any specification.

Third, as with the first dimension, a large proportion of the variance is explained by the location of the political groups. The magnitude of these coefficients explains their location on the second dimension: with the most pro-European political groups having the most positive coefficients, and the most anti-European political groups having the most negative coefficients. One exception is the Liberal group, which has historically been very pro-European, yet has a negative coefficient because this group has had lower scores on this dimension than the Socialists and European People's Party. Nevertheless, the Liberals are closer to the two largest parties on this dimension than are the other small parties, except the British Conservatives. The British Conservatives, however, have a positive coefficient because they were relatively pro-European in the first and second parliaments when they were a separate political group.

Fourth, member state variables are not significant on the second dimension. In other words, there are no clear and consistent patterns of voting along national lines on the second dimension.

TABLE 6 ABOUT HERE

³ Using the results in model 1 in Table 5.

These results also hold when we analyze our data parliament by parliament, as Table 6 shows. Here, we use the expert judgements data rather than the party manifesto data as they give a better fit. The first dimension is explained by left-right policy positions in all parliaments both with and without political group dummy variables. Regarding the second dimension, the parliament by parliament results reveal that this dimension is less consistently related to a single set of policy preferences or institutional interests. The government participation variable is for example only significant in the fourth parliament on this dimension. This is in part due to the small number of observations in the parliament by parliament analysis compared to the larger sample size in the pooled analysis, as can be seen from the higher standard errors in the parliament by parliament results.

Regarding changes over time, and whether the left-right and EU integration dimensions have become more independent or merged, the results suggest that while the first dimension has always been strongly associated with the left-right dimension, the second dimension has become increasingly associated with pro-/anti-Europe positions. In the first parliament, for example, the first dimension of voting in the European Parliament was captured by both left-right and EU policy positions, while the second dimension also seemed to be related to the left-right. This is not surprising given the fact that in this period, left-right and EU policy positions of parties were relatively highly correlated (with a coefficient of .350). In no other parliament were these two sets of policy preferences correlated. Since the third parliament, government participation and EU policy positions are more clearly associated with voting patterns on the second dimension. In fact, EU policy positions are significant in the fourth and fifth parliaments both when party dummy variables are excluded and when they are included. Hence, in the late 1990s, EU policy positions explain variations between the party groups as well as within the party groups on the second dimension.

Put together with the goodness-of-fit statistics reported above, which show that the first dimension captures an increasing proportion of voting, the parliament by parliament results suggest that the second dimension may have declined in significance but has become more clearly associated with a set of institutional interests (being in government) and policy positions that are independent of left-right preferences.

As a robustness check, we replicated these statistical models using the Optimal Classification method of scaling roll-call votes. As Rosenthal and Voeten (2004) show, Optimal Classification can sometimes produce a quite different set of ideal point estimates to NOMINATE. However, in the European Parliament, this method produces an almost identical set of estimates and results to the ones we have described.⁴ It is not our purpose here to discuss which of the two methods is the most appropriate for the European Parliament. Our intention is rather to demonstrate that the analysis of the two main dimensions of politics in the European Parliament is virtually unchanged, whichever of these two scaling methods are used. We base our main results on NOMINATE rather than Optimal Classification for two reasons. First, NOMINATE is the main method currently applied to roll-call voting comparatively. Second, we find that the explanatory power of the independent variables on the ideal point estimates is always higher for NOMINATE than for Optimal Classification when using the expert judgements data.

5. Conclusion

⁴ The results of using Optimal Classification instead of NOMINATE are available on our website, <http://personal.lse.ac.uk/hix>.

The European Parliament is surprisingly like all other democratic parliaments. The main dimension of voting behavior both within and between the transnational political parties in the European Parliament is the classic left-right dimension of democratic politics. Left-right politics explains an overwhelming proportion of voting in the European Parliament. In contrast, national interests, independent of national party positions, have very little systematic influence on voting in the European Parliament. This finding is surprising from the perspective of some of the ‘state interest’ based theories of EU politics (e.g. Moravcsik, 1998).

There is a second, but considerably less salient and less stable, dimension of politics in the European Parliament. This dimension partly captures government-opposition dynamics at the European level, with parties represented in the Council voting one way and parties not represented voting the other way. By the late 1990s, this dimension also began to reflect pro- and anti-European integration positions of political parties. The main political families – the European People’s Party, the Socialists, and the Liberals – are all strongly pro-European and also dominate the seats in the Council and the Commission. As a result, on this dimension, conflict between these main political groups and the smaller political groups is explained by party policies towards European integration as well as party representation in the other EU institutions.

These results provide a new perspective on the existing understanding of the dimensionality EU politics. The dominance of the left-right conflict across the whole period supports the view that the dominant socio-economic positions in domestic politics shape actors’ positions in the EU policy process more strongly and more consistently than more general preferences about the speed and nature of European integration. Nevertheless, the gradual stabilization of a second dimension around pro-/anti-Europe positions suggests that the question of the allocation of powers to the center or the states cannot easily be subsumed into the left-right dimension. In this regard, the EU is similar to most other territorially divided polities.

Finally, our results suggest an optimistic conclusion about the accountability and stability of EU governance. Politics in the European Parliament is very much like politics in other democratic parliaments, dominated by left-right positions and driven by the traditional party families of domestic European politics. Put this way, transnational party politics in the European Parliament counter-balances national-interest based politics in the EU Council.

References

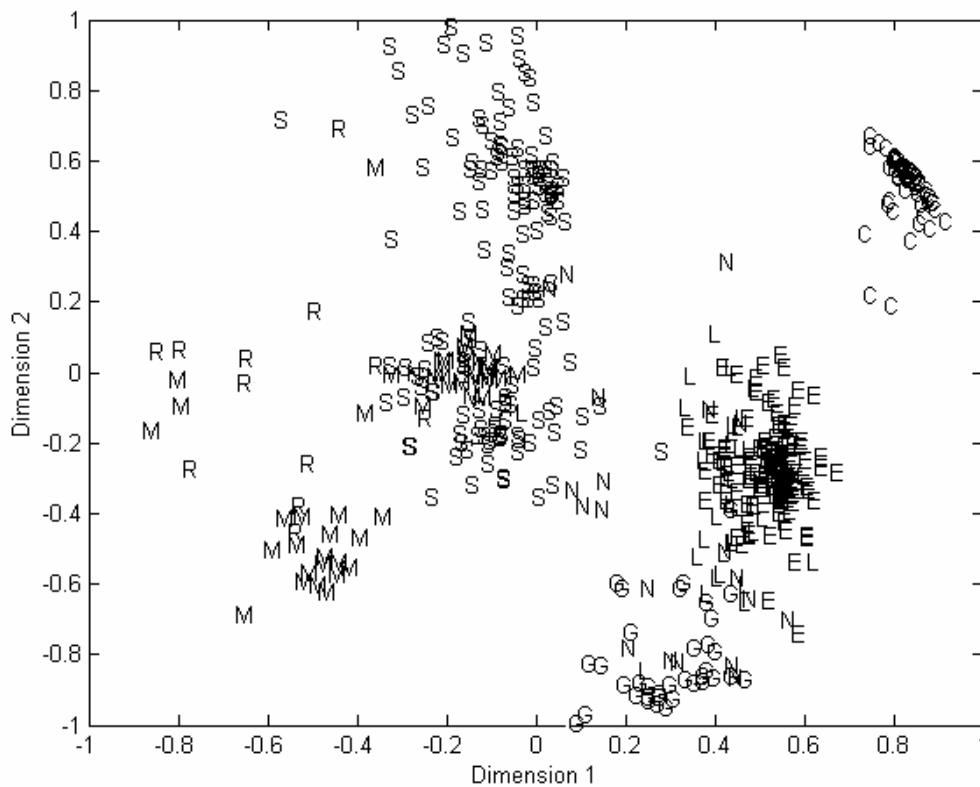
- Aspinwall, Mark. 2002. Preferring Europe: Ideology and National Preferences on European Integration. *European Union Politics* 3:81-112.
- Attinà, Fulvio. 1990. The Voting Behaviour of the European Parliament Members and the Problem of Europarties. *European Journal of Political Research* 18:557-79.
- Brzinski, Joanne Bay. 1995. Political Group Cohesion in the European Parliament, 1989-1994. In *The State of the European Union, Vol. 3*, edited by Carolyn Rhodes and Sonia Mazey, London: Longman.
- Budge, Ian, Hans-Dieter Klingemann, Andrea Volkens, Judith Bara and Eric Tanenbaum. 2001. *Mapping Policy Preferences: Estimates for Parties, Electors, and Governments 1945-1998*. Oxford: Oxford University Press.
- Carrubba, Clifford J., Matthew Gabel, Lacey Murrah, Ryan Clough, Elizabeth Montgomery and Rebecca Schambach. 2004. 'A Second Look at Legislative Behavior in the European Parliament: Roll-Call Votes and the Party System', Working Paper, Vienna: Institute for Advanced Studies.
- Cox, Gary W. and Matthew D. McCubbins. 1993. *Legislative Leviathan*. Berkeley, CA: University of California Press.
- Diermeier, Daniel and Timothy J. Feddersen. 1998. Cohesion in legislatures and the vote of confidence procedure. *American Political Science Review* 92:611-21.
- van der Eijk, Cees and Mark Franklin. Eds. 1996. *Choosing Europe? The European Electorate and National Politics in the Face of Union*. Ann Arbor, MI: University of Michigan Press.
- Gabel, Matthew J. and Christopher J. Anderson. 2002. The Structure of Citizen Attitudes and the European Political Space. *Comparative Political Studies* 35:893-913.
- Gabel, Matthew J. and Simon Hix. 2002. Defining the EU Political Space: An Empirical Study of the European Elections Manifestos, 1979-1999. *Comparative Political Studies* 35:934-964.
- Heckman, James J. and James M. Snyder Jr. 1997. Linear Probability Models of the Demand for Attributes with an Empirical Application to Estimating the Preferences of Legislators. *Rand Journal of Economics* 28: S142-S189.

- Hix, Simon. 1999. Dimensions and Alignments in European Union Politics: Cognitive Constraints and Partisan Responses. *European Journal of Political Research* 35:69-106.
- Hix, Simon. 2001. Legislative Behaviour and Party Competition in European Parliament: An Application of Nominate to the EU. *Journal of Common Market Studies* 39:663-688.
- Hix, Simon. 2002. Parliamentary Behavior with Two Principals: Preferences, Parties, and Voting in the European Parliament. *American Journal of Political Science* 46:688-698.
- Hix, Simon and Christopher Lord. 1997. *Political Parties in the European Union*. Basingstoke: Macmillan.
- Hix, Simon, Abdul Noury and Gérard Roland. 2005. Power to the Parties: Cohesion and Competition in the European Parliament, 1979-2001. *British Journal of Political Science* 35:209-234.
- Hooghe, Liesbet and Gary Marks. 1999. The Making of a Polity: The Struggle Over European Integration. In *Continuity and Change in Contemporary Capitalism*, edited by Herbert Kitschelt, Peter Lange, Gary Marks and John Stephens, Cambridge: Cambridge University Press.
- Hooghe, Liesbet, Gary Marks and Carole Wilson. 2002. Does Left/Right Structure Party Positions on European Integration? *Comparative Political Studies* 35:965-989.
- Huber, John. 1996. The Impact of Confidence Votes on Legislative Politics in Parliamentary Systems. *American Political Science Review* 90:269-82.
- Huber, John and Ronald Inglehart. 1995. Expert Interpretations of Party Space and Party Locations in 42 Societies. *Party Politics* 1:73-111.
- Kiewiet, D. Roderick and Mathew D. McCubbins. 1991. *The Logic of Delegation: Congressional Parties and the Appropriations Process*. Chicago: University of Chicago Press.
- Kreppel, Amie. 2002. *The European Parliament and Supranational Party System*. Cambridge: Cambridge University Press.
- Kreppel, Amie and George Tsebelis. 1999. Coalition Formation in the European Parliament. *Comparative Political Studies* 32:933-966.
- Laver, Michael J., ed. 2001. *Estimating the Policy Positions of Political Actors*. London: Routledge.
- Laver, Michael J., Kenneth R. Benoit and John Garry. 2003. Extracting Policy Positions from Political Texts Using Words as Data. *American Political Science Review* 97:311-31.

- Laver, Michael J. and W. Ben Hunt. 1992. *Policy and Party Competition*. London: Routledge.
- Marks, Gary and Marco Steenbergen. 2002. Introduction: Understanding Political Contestation in the European Union. *Comparative Political Studies* 35:879-892.
- Marks, Gary and Marco Steenbergen. 2004. *Marks/Steenbergen Party Dataset*, Chapel Hill, NC: University of North Carolina Chapel Hill, available at:
<http://www.unc.edu/~gwmmarks/data.htm>.
- Marks, Gary, Carole Wilson and Leonard Ray. 2001. National Political Parties and European Integration. *American Journal of Political Science* 46:585-94.
- Mattila, Miko. 2004. Contested Decisions: Empirical Analysis of Voting in the EU Council of Ministers. *European Journal of Political Research* 43: 29-50.
- Mattila, Miko and Jan-Eric Lane. 2001. Why Unanimity in the Council? A Roll Call Analysis of Council Voting. *European Union Politics* 2:31-52.
- Moravcsik, Andrew. 1998. *The Choice for Europe: Social Purpose and State Power from Messina to Maastricht*. Ithaca, NY: Cornell University Press.
- Noury, Abdul. 2002. Ideology, Nationality and Euro-Parliamentarians. *European Union Politics* 3:33-58.
- Noury, Abdul and Gérard Roland. 2002. 'More Power to the European Parliament?', *Economic Policy* 34: 279-320.
- Poole, Keith T. 2000. Non-Parametric Unfolding of Binary Choice Data. *Political Analysis* 8:211-32.
- Poole, K. T. and H. Rosenthal (1985) 'A Spatial Model for Legislative Roll-call Analysis', *American Journal of Political Science* 29: 357-384.
- Poole, Keith T. and Howard Rosenthal. 1997. *A Political-Economic History of Roll Call Voting*. Oxford: Oxford University Press.
- Raunio, Tapio. 1997. *The European Perspective: Transnational Party Groups in the 1989-1994 European Parliament*. London: Ashgate.
- Rosenthal, Howard and Erik Voeten. 2004. "Analyzing Roll Calls with Perfect Spatial Voting: France 1946-1958", *American Journal of Political Science*. 48(3): 620-632.
- Schonhardt-Bailey, Cheryl. 2003. Ideology, Party and Interests in the British Parliament of 1841-1847. *British Journal of Political Science* (forthcoming).

- Tsebelis, George. 1994. The Power of the EP as a Conditional Agenda-Setter, *American Political Science Review* 88:128-42.
- Tsebelis, George. 2002. *Veto Players: How Political Institutions Work*. Princeton, NJ: Princeton University Press.
- Tsebelis, George and Geoffrey Garrett. 2000. Legislative Politics in the European Union. *European Union Politics* 1:9-36.
- Tsebelis, George and Geoffrey Garrett. 2001. The Institutional Foundations of Intergovernmentalism and Supranationalism in the European Union. *International Organization* 55:357-90.
- Voeten, Erik. 2000. Clashes of The Assembly. *International Organization* 54:185-214.

Figure 1a. MEP Ideal Points in the First European Parliament (1979-1984)



Tokens used in Figures 1a-1e.

Political group	Abbreviation	Token
Anti-Europeans	ANTI	A
British Conservatives and allies	CON	C
Christian Democrats and Conservatives	EPP	E
Italian Conservatives	FE	F
French Gaullists and allies	GAUL	G
Liberals	LIB	L
Radical Left	LEFT	M
Non-attached members	NA	N
Italian Communists and Allies	LSOC	O
Regionalists	REG	R
Socialists	SOC	S
Greens	GRN	V
Radical Right	RIGHT	X

Figure 1b. MEP Ideal Points in the Second European Parliament (1984-1989)

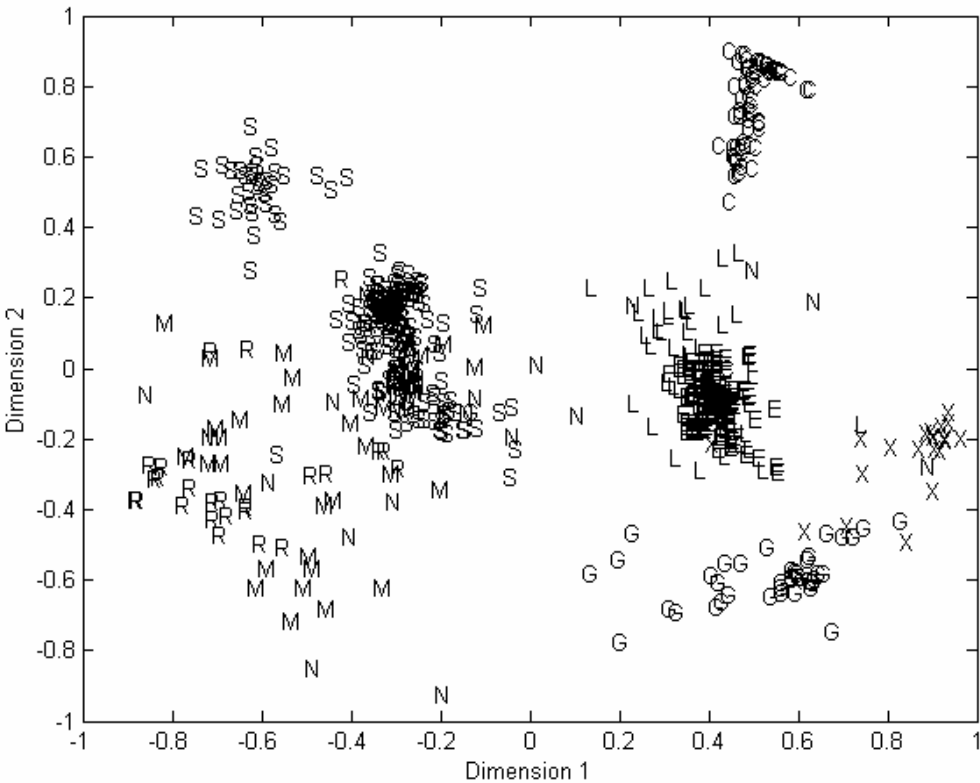


Figure 1c. MEP Ideal Points in the Third European Parliament (1989-1994)

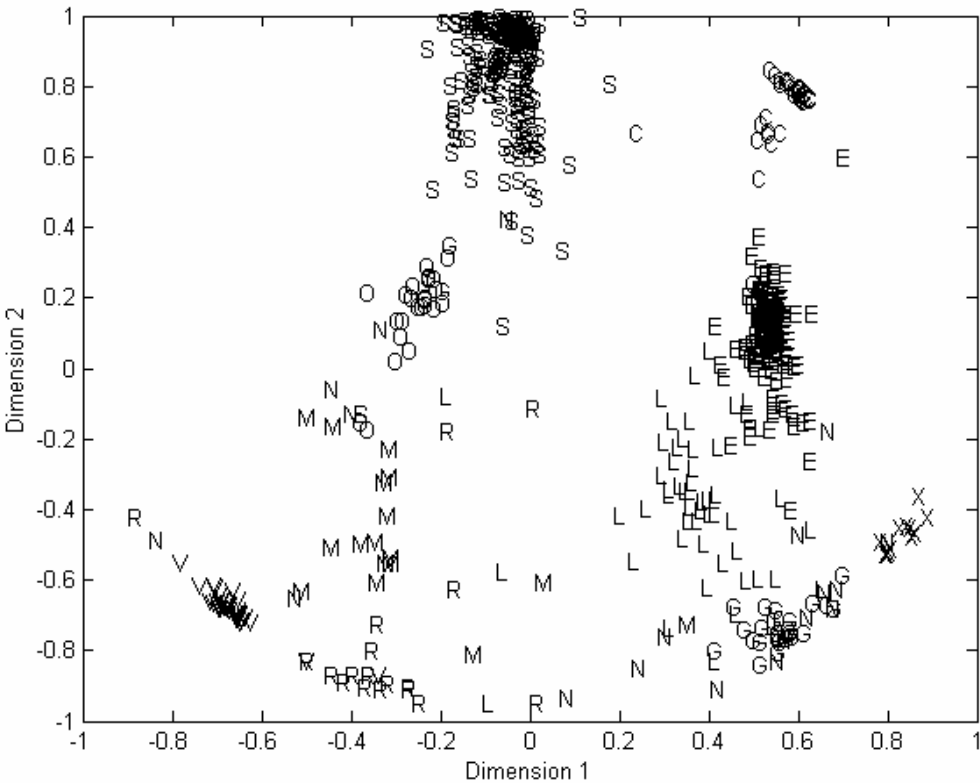


Figure 1d. MEP Ideal Points in the Fourth European Parliament (1994-1999)

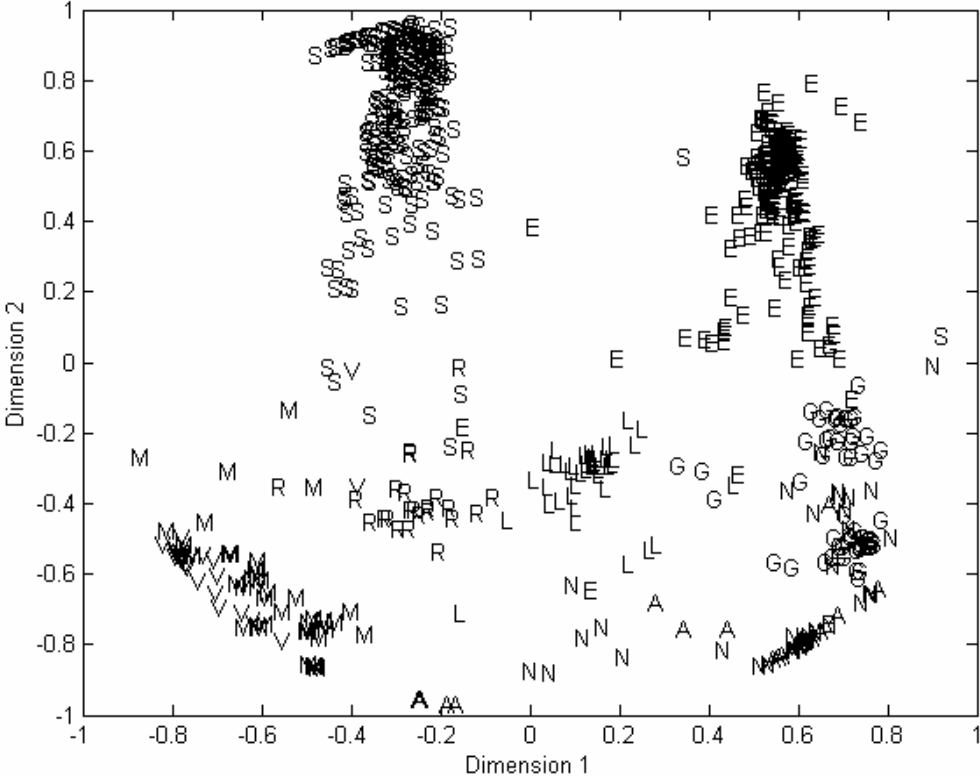


Figure 1e. MEP Ideal Points in the Fifth European Parliament (1999-2001)

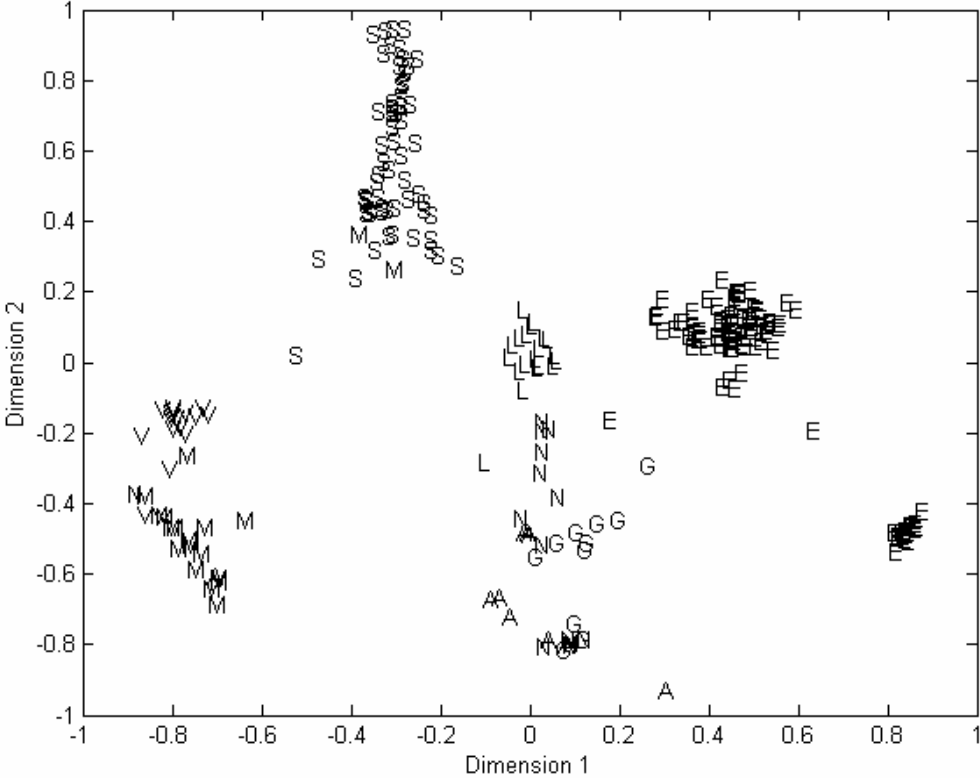


Table 1. Political Parties in the European Parliament, 1979-1999

Party Description	Abbr.	First Parliament (June 1979)		Second Parliament (June 1984)		Third Parliament (June 1989)		Fourth Parliament (June 1994)		Fifth Parliament (June 1999)	
		Seats	%	Seats	%	Seats	%	Seats	%	Seats	%
<i>Transnational Political Groups</i>											
Socialists	SOC	113	27.6	130	30.0	180	34.7	198	34.9	180	28.8
Christian Democrats and Conservatives	EPP	107	26.1	110	25.3	121	23.4	157	27.7	233	37.2
Liberals	LIB	40	9.8	31	7.1	49	9.5	43	7.6	51	8.1
Radical Left	LEFT	44	10.7	43	9.9	14	2.7	28	4.9	42	6.7
Regionalists	REG	11	2.7	19	4.4	13	2.5	19	3.4		
Greens	GRN					30	5.8	23	4.1	48	7.7
Extreme Right	RIGHT			16	3.7	17	3.3				
Non-attached members	NA	9	2.2	6	1.4	12	2.3	27	4.8	26	4.2
<i>National Party-Based Groups</i>											
French Gaullists and allies	GAUL	22	5.4	29	6.7	20	3.9	26	4.6	30	4.8
British Conservatives and allies	CON	64	15.6	50	11.5	34	6.6				
Italian Communists and allies	LSOC					28	5.4				
Italian Conservatives	FE							27	4.8		
Anti-Europeans (mainly French)	ANTI							19	3.4	16	2.6
Total MEPs		410		434		518		567		626	
No. of Roll-Call Votes		886		2135		2715		3740		2124	

Table 2. Dimensionality in the European Parliament and Other Assemblies

	Number of scaleable roll-calls	Number of scaleable legislators	Percent of roll-call vote decisions predicted correctly			Aggregate Proportional Reduction of Error (APRE)		
			dim. 1	Dim. 2	dim. 2- dim. 1	dim. 1	dim. 2	dim. 2- dim. 1
European Parliament 1 (1979-84)	787	500	86.0	91.5	5.5	46.9	67.6	20.7
European Parliament 2 (1984-89)	1690	612	88.6	92.4	3.8	52.9	68.6	15.7
European Parliament 3 (1989-94)	2269	586	89.9	91.8	1.9	54.8	63.5	8.7
European Parliament 4 (1994-99)	3360	716	87.8	90.0	2.2	48.5	58.0	9.5
European Parliament 5 (1999-01)	1914	644	87.5	89.9	2.4	51.2	60.5	9.3
US House of Representatives (1997-98)	946	443	88.2	89.2	1.0	64.4	67.4	3.0
US Senate (1997-98)	486	101	88.0	88.5	.5	64.2	66.0	1.8
French National Assembly (1951-56)	341	645	93.3	96.0	2.7	81.8	89.2	7.4
United Nations General Assembly (1991-96)	344	186	91.8	93.0	1.2	62.1	67.7	5.6

Note: US House and Senate data from Poole and Rosenthal (1997), UN General Assembly data from Voeten (2000), French National Assembly data from Rosenthal and Voeten (2004).

Table 3. Correlation Between MEP NOMINATE Scores in Consecutive Parliaments

Correlation	Dimension 1	Dimension 2	No. of MEPs
EP1-EP2	.905	.792	243
EP2-EP3	.945	.642	283
EP3-EP4	.948	.813	263
EP4-EP5	.919	.769	295

Note: Pearson correlation coefficients are calculated for all MEPs who served in two consecutive parliaments.

Table 4. Interpreting the Dimensions: Pooled Results for Dimension 1

	<i>Dependent Variable: Mean national party score on NOMINATE dimension 1</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Left-Right (Exp)	1.611 (.053)***			.859 (.100)***			.890 (.084)***		
EU Integration (Exp)	.025 (.009)***			-.007 (.010)			-.005 (.010)		
Combined L-R (Man)		.012 (.001)***			.003 (.001)***			.003 (.001)***	
EU Integration (Man)		.017 (.007)**	.020 (.006)***		.000 (.005)	.003 (.006)		.001 (.005)	.004 (.006)
Social L-R (Man)			.017 (.003)***			.006 (.002)**			.004 (.002)**
Economic L-R (Man)			.022 (.002)***			.003 (.002)*			.003 (.002)*
In Government	.073 (.033)**	.088 (.043)**	.067 (.044)	.045 (.021)**	.034 (.023)	.039 (.024)	.014 (.020)	.002 (.024)	-.010 (.025)
Commissioner	.058 (.036)	.114 (.049)**	.072 (.049)	.002 (.023)	.038 (.022)*	.029 (.024)	.018 (.025)	.058 (.027)**	.056 (.028)**
SOC				-.436 (.037)***	-.606 (.032)***	-.616 (.034)***	-.432 (.033)***	-.619 (.030)***	-.634 (.031)***
LSOC				-.386 (.061)***	-.683 (.049)***	-.709 (.051)***	-.488 (.050)***	-.731 (.059)***	-.830 (.052)***
LIB				-.212 (.031)***	-.199 (.034)***	-.171 (.036)***	-.216 (.030)***	-.200 (.031)***	-.177 (.033)***
GRN				-.867 (.060)***	-1.069 (.046)***	-1.058 (.054)***	-.873 (.054)***	-1.106 (.046)***	-1.103 (.051)***
CON				-.007 (.044)	.036 (.047)	.103 (.048)**	.021 (.050)	.086 (.062)	.137 (.068)**
LEFT				-.612 (.076)***	-.866 (.053)***	-.878 (.057)***	-.565 (.070)***	-.853 (.054)***	-.888 (.054)***
GAUL				-.086 (.058)	.026 (.072)	.035 (.080)	-.092 (.058)	.032 (.068)	.043 (.074)
NA				-.349 (.061)***	-.355 (.113)***	-.239 (.126)*	-.385 (.059)***	-.377 (.108)***	-.264 (.119)**
REG				-.685 (.062)***	-.799 (.066)***	-.795 (.090)***	-.723 (.059)***	-.836 (.074)***	-.834 (.094)***
RIGHT				.025 (.078)	.348 (.073)***	.388 (.078)***	-.027 (.075)	.309 (.082)***	.323 (.074)***
ANTI				-.472 (.076)***	-	-	-.487 (.072)***	-	-
Constant	-.858 (.059)***	.087 (.057)	-.055 (.051)	.011 (.096)	.490 (.040)***	.423 (.050)***	-.015 (.096)	.480 (.051)***	.417 (.057)***
Country fixed-effects	No	No	No	No	No	No	Yes	Yes	Yes
Observations	352	288	271	352	288	271	352	288	271
Adj. R-squared	.70	.37	.39	.87	.82	.82	.89	.83	.83

Note: Robust standard errors in parentheses. * significant at 10%, ** significant at 5%, * significant at 1%. Dummy variables for the second, third, fourth and fifth European Parliaments are included but not reported. We indicate the level of significance of the coefficients of the member state fixed effects if a majority of these fixed effects are significant at the relevant level. However, almost none of these variables are significant.

Table 5. Interpreting the Dimensions: Pooled Results for Dimension 2

	<i>Dependent Variable: Mean national party score on NOMINATE dimension 2</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Left-Right (Exp)	-.262 (.089)***			-.316 (.116)***			-.240 (.114)**		
EU Integration (Exp)	.106 (.013)***			.036 (.016)**			.030 (.017)*		
Combined L-R (Man)	-.003 (.001)**			-.002 (.001)*			-.002 (.001)		
EU Integration (Man)	.016 (.010)		.007 (.011)	-.004 (.008)		-.012 (.008)	-.002 (.010)		-.012 (.010)
Social L-R (Man)	-.001 (.004)			-.003 (.003)			-.002 (.003)		
Economic L-R (Man)	.002 (.003)			.003 (.003)			.004 (.004)		
In Government	.165 (.050)***	.258 (.058)***	.260 (.061)***	.072 (.034)**	.086 (.037)**	.089 (.038)**	.087 (.036)**	.094 (.040)**	.093 (.042)**
Commissioner	.265 (.059)***	.286 (.066)***	.281 (.067)***	.022 (.043)	.012 (.045)	.007 (.045)	.007 (.044)	-.012 (.046)	-.016 (.047)
SOC				.291 (.058)***	.318 (.052)***	.350 (.051)***	.310 (.058)***	.335 (.055)***	.385 (.055)***
LSOC				.029 (.071)	.091 (.053)*	.143 (.057)**	.067 (.081)	.118 (.092)	.198 (.094)**
LIB				-.306 (.044)***	-.340 (.047)***	-.344 (.048)***	-.328 (.046)***	-.354 (.053)***	-.358 (.055)***
GRN				-.636 (.063)***	-.706 (.057)***	-.703 (.062)***	-.626 (.064)***	-.678 (.067)***	-.686 (.070)***
CON				.577 (.129)***	.483 (.108)***	.396 (.123)***	.536 (.128)***	.401 (.124)***	.289 (.138)**
LEFT				-.512 (.095)***	-.549 (.091)***	-.494 (.095)***	-.468 (.104)***	-.503 (.099)***	-.440 (.099)***
GAUL				-.619 (.057)***	-.772 (.050)***	-.759 (.047)***	-.593 (.058)***	-.685 (.064)***	-.636 (.056)***
NA				-.423 (.087)***	-.615 (.088)***	-.607 (.109)***	-.457 (.087)***	-.605 (.091)***	-.576 (.106)***
REG				-.443 (.097)***	-.465 (.088)***	-.508 (.101)***	-.448 (.106)***	-.452 (.093)***	-.504 (.104)***
RIGHT				-.125 (.131)	-.344 (.086)***	-.372 (.089)***	-.099 (.143)	-.223 (.103)**	-.219 (.105)**
ANTI				-.672 (.083)***	-	-	-.671 (.093)***	-	-
Constant	-.701 (.107)***	-.299 (.086)***	-.280 (.094)***	-.097 (.139)	-.016 (.085)	-.010 (.090)	-.088 (.148)	.010 (.103)	.009 (.108)
Country fixed-effects	No	No	No	No	No	No	Yes	Yes	Yes
Observations	352	288	271	352	288	271	352	288	271
Adj. R-squared	.31	.20	.18	.65	.66	.65	.65	.66	.66

Note: Robust standard errors in parentheses. * significant at 10%, ** significant at 5%, * significant at 1%. Dummy variables for the second, third, fourth and fifth European Parliaments are included but not reported. We indicate the level of significance of the coefficients of the member state fixed effects if a majority of these fixed effects are significant at the relevant level. However, almost none of these variables are significant.

Table 6. Interpreting the Dimensions: Parliament by Parliament Results

<i>Dependent Variable:</i>	<i>Dimension 1-EP1</i>		<i>Dimension 1-EP2</i>		<i>Dimension 1-EP3</i>		<i>Dimension 1-EP4</i>		<i>Dimension 1-EP5</i>	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Left-Right (Exp)	1.172 (.138)***	.482 (.206)**	1.620 (.115)***	.974 (.234)***	1.490 (.103)***	.921 (.240)***	1.787 (.100)***	.454 (.175)**	1.524 (.133)***	.626 (.173)***
EU Integration (Exp)	.061 (.020)***	.029 (.025)	.004 (.016)	.003 (.031)	.020 (.019)	.006 (.019)	.021 (.016)	-.021 (.010)*	.037 (.020)*	-.008 (.015)
In Government	.055 (.073)	.038 (.043)	.167 (.070)**	.068 (.051)	.088 (.078)	.048 (.044)	.093 (.056)	.002 (.031)	-.030 (.081)	-.012 (.032)
Commissioner	.088 (.060)	-.012 (.041)	-.067 (.057)	-.019 (.047)	.099 (.072)	.030 (.046)	.107 (.070)	.000 (.031)	.106 (.088)	.052 (.033)
Constant	-.834 (.066)***	-.013 (.221)	-.886 (.102)***	-.296 (.239)	-.830 (.144)***	-.222 (.218)	-1.068 (.112)***	.317 (.157)**	-1.123 (.107)***	.030 (.151)
Party Fixed Effects	No	Yes***	No	Yes***	No	Yes***	No	Yes***	No	Yes***
Observations	44	44	55	55	62	62	83	83	108	108
Adjusted R-squared	.70	.90	.80	.91	.72	.91	.76	.95	.54	.88

<i>Dependent Variable:</i>	<i>Dimension 2-EP1</i>		<i>Dimension 2-EP2</i>		<i>Dimension 2-EP3</i>		<i>Dimension 2-EP4</i>		<i>Dimension 2-EP5</i>	
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
Left-Right (Exp)	-.908 (.270)***	-.675 (.219)***	.192 (.149)	.281 (.185)	-.467 (.236)*	-.301 (.313)	-.034 (.180)	-.324 (.426)	-.219 (.085)**	-.313 (.091)***
EU Integration (Exp)	.012 (.045)	.023 (.033)	.005 (.028)	-.037 (.035)	.076 (.036)**	-.077 (.067)	.166 (.024)***	.031 (.015)**	.149 (.012)***	.062 (.011)***
In Government	.111 (.110)	-.009 (.101)	.032 (.102)	-.026 (.055)	.203 (.181)	.020 (.060)	.310 (.097)***	.038 (.055)	.035 (.062)	-.023 (.036)
Commissioner	.131 (.131)	.159 (.109)	.268 (.112)**	.069 (.062)	.295 (.201)	-.012 (.089)	.363 (.121)***	.017 (.066)	.231 (.078)***	.021 (.047)
Constant	.200 (.242)	-.092 (.243)	-.253 (.137)*	-.031 (.203)	-.385 (.260)	.760 (.555)	-1.078 (.101)***	.407 (.342)	-.794 (.059)***	-.122 (.089)
Party Fixed Effects	No	Yes***	No	Yes***	No	Yes***	No	Yes***	No	Yes***
Observations	44	44	55	55	62	62	83	83	108	108
Adjusted R-squared	.23	.53	.15	.75	.18	.85	.50	.87	.64	.91

Note: Robust standard errors in parentheses. * significant at 10%, ** significant at 5%, * significant at 1%. We indicate the level of significance of the coefficients of party and member state fixed effects if a majority of these fixed effects are significant at the relevant level. Almost all party fixed effects are significant whenever these variables are entered, whereas almost none of the member state fixed effects are significant.

Appendix

Table A1. Descriptive Statistics

Variable	Observations	Mean	Standard Deviation	Min	Max
Pooled dimension 1	437	.017	.470	-.899	.863
Pooled dimension 2	437	-.098	.471	-.974	.927
EP1-dimension 1	57	.131	.402	-.752	.814
EP1-dimension 2	57	-.079	.380	-.836	.791
EP2-dimension 1	73	.013	.474	-.876	.863
EP2-dimension 2	73	-.061	.274	-.685	.823
EP3-dimension 1	85	.091	.427	-.713	.827
EP3-dimension 2	85	-.173	.578	-.954	.927
EP4-dimension 1	103	.033	.483	-.798	.724
EP4-dimension 2	103	-.067	.551	-.974	.882
EP5-dimension 1	119	-.158	.481	-.899	.862
EP5-dimension 2	119	-.104	.378	-.922	.865
Left-Right (Exp)	352	.503	.229	0	1
EU Integration (Exp)	369	5.275	1.682	1	7
Combined Left-Right (Man)	346	.208	21.721	-40.030	64.710
EU Integration (Man)	289	2.384	3.424	-9.722	25.698
Social Left-Right (Man)	330	5.509	9.813	-17.687	48.400
Economic Left-Right (Man)	337	9.201	9.150	-13.900	53.658
In Government	437	.343	.475	0	1
Commissioner	437	.195	.391	0	1
SOC	437	.192	.394	0	1
EPP	437	.259	.438	0	1
LIB	437	.137	.345	0	1
GRN	437	.078	.268	0	1
LSOC	437	.002	.048	0	1
LEFT	437	.094	.292	0	1
GAUL	437	.043	.204	0	1
CON	437	.016	.126	0	1
NA	437	.071	.257	0	1
REG	437	.073	.261	0	1
RIGHT	437	.011	.106	0	1
ANTI	437	.023	.150	0	1