

# Procedural and Party Effects in European Parliament Roll Call Votes<sup>1</sup>

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Studies of recorded voting decisions (roll call votes) in the European Parliament (EP) show that members vote predominately along ideological lines (Hix et al., 2007). The standard approach in the literature is to study all votes within a certain period (e.g Hix, 2001; Hix et al., 2006). This approach assigns equal weight to all votes. However, most roll calls votes are on resolutions, whose direct policy impact may be very limited (Carubba et al., 2006). If the motivation for investigating voting in the EP is the institution's increased role in EU legislative politics, the focus should be on legislative votes (Tsebelis and Garrett, 2000; Crombez, 2001). To the extent that procedures influence voting behaviour in the EP, the standard approach risks overemphasizing patterns from resolution votes and miss important aspects that are only present in legislative votes.

Two features distinguish voting on resolutions from voting on legislative votes: agenda-control and the majority requirement. The major party groups in the EP enjoy significantly less agenda control on legislative votes than on resolutions. For example, in the 2<sup>nd</sup> reading of the codecision procedure, the agenda is constrained to amendments to the common position of the Council. On resolutions, the party groups in the EP set the agenda. Furthermore, in 2<sup>nd</sup> reading codecision amendments, an absolute majority of all MEPs are required in order to pass amendments. If not, the common position of the Council becomes EU law. On resolutions, a simple majority suffice.

The spatial model of voting is the basis for research on voting in the EP. *Nominate*,

the standard statistical implementation of this model, assumes away both procedural differences and party-specific voting inducements (Poole, 2005). This is also the case for standard Bayesian approach (Carroll et al., 2009; Clinton and Jackman, 2009; Jackman, 2001). However, an advantage of the Bayesian approach is that it is easier to extend it in order to take such effects into account (Clinton et al., 2004; Clinton and Jackman, 2009). Taking the latter approach, I extend the spatial model to allow MEPs to take up procedure-specific revealed positions and test for party-specific voting inducements. Carrubba et al. (2006) appropriately question the reliability of traditional studies of roll call voting in legislatures where the majority of votes are not by roll call (see also Carey, 2009; Carrubba et al., 2006, 2008, 2009). Their study of the first year of the 1999-2004 European Parliament reveals that roll call votes were neither called on a random sample of votes, nor requested proportionally by party groups. Most roll call votes are taken on resolutions. Roll call votes on codecision and assent legislation are in the minority (see also Thiem, 2006). In order to deal with the selection issues, it is necessary to include a selection stage in the model (see Hug, 2010).

My focus is on the influence of parties and procedures on MEPs behaviour on roll call votes in the EP. Contrary to the assumption of sincere voting in the standard operationalisation of the spatial model, I find evidence of substantive vote-specific party-group inducements on 2<sup>nd</sup> reading codecision amendments as well as evidence that MEPs adopt different positions across procedures. These differences are mainly national party-delegation specific, suggesting that national party leadership may be able to influence the voting behaviour of their MEPs. Failure to account for these effects causes over-reporting of the separation between party groups and underreporting of the heterogeneity within the groups on recorded roll calls.

## **Procedural and Party Effects in the EP**

Parties play several roles in a legislature. Two of the most important are (1) structuring the voting behaviour of their members, and (2) setting the agenda (Aldrich, 1995; Cox and McCubbins, 1993, 2005). In the European Parliament, the extent of internal agenda-setting power varies by procedure. While the agenda is set internally on resolutions,

it is set externally in legislative and budgetary procedures. For example, in the 2<sup>nd</sup> reading of the codecision procedure the EP can only propose amendments to the common position adopted by the Council of Ministers. Hix et al. (2007, 105 – 131) investigates the determinants of voting cohesion in the EP. Due to substantive variation in the overall level of cohesion during the period under investigation (1979 – 2004), the focus is on the relative level of cohesion. The absolute agreement index (AI) is

$$AI_i = \frac{\max(\text{yes}_i, \text{no}_i, \text{abstain}_i) - .5 * ((\text{yes}_i + \text{no}_i + \text{abstain}_i) - \max(\text{yes}_i, \text{no}_i, \text{abstain}_i))}{(\text{yes}_i + \text{no}_i + \text{abstain}_i)},$$

where  $i$  indicates party (Hix et al., 2007, 91). The relative level of cohesion is calculated by dividing this value by the cohesiveness of the EP as a whole. The three main party groups (EPP, PES and ELDR) are less cohesive on codecision than on resolution votes.<sup>2</sup> All parties except ELDR and UEN are more cohesive when their party requests the roll call. PES is more cohesive on amendments where the rapporteur is from their party. Rapporteurs have no significant effect for the cohesiveness of the other parties. Internal agenda control reduces the relative frequency of roll call votes that split parties internally. Furthermore, as party cohesiveness increases for parties that request roll calls, parties are able to use vote-specific inducements to ensure that their MEPs cast their votes the “right” way. This suggests that parties play a major role in determining the MEPs voting behaviour.

The standard approach of estimating ideal points in the EP, using either all votes from a certain period (eg Hix, 2001; Noury, 2002; Hix et al., 2006, 2007) or a random sample of votes (Han, 2007), risks highlighting the pattern of voting behaviour on non-legislative rather than legislative votes. If parties are more cohesive on non-legislative than on legislative votes, standard ideal point estimates may over-report the clustering around party groups if such clustering mainly occurs on resolutions (as reported in Hix et al., 2007, 105 – 131). Consumers of *Nominate* scores may fail to appreciate that this picture may not be representative for the voting behaviour in the legislative procedures, where agenda control is weaker. Furthermore, the standard approach is not capable of taking vote-specific party inducements or procedural effects into account.

The next section extends the standard spatial model to allow legislators to adopt procedure-specific positions and opens up for the possibility that voting on codecision

legislation may be influenced by party-specific voting instructions.

## Estimating procedural and party effects

The spatial model of voting arranges both actors and policies geometrically in a low-dimensional space. Actor  $i$  has a quadratic loss function around her ideal policy located at  $\theta_i$ . Her utility of policy  $j$  is  $U_i(p) = -(\theta_i - j)^2$ . This is obviously minimised when  $\theta_i = j$ . In other words, she receives the highest possible utility if a policy is located exactly at her ideal point. She loses utility as the policy moves away from her ideal point. Conversely, she gains utility as a policy moves towards her ideal point (Hinich and Munger, 1997).

The statistical implementation of this model is presented in Bafumi et al. (2005) and Clinton et al. (2004). It can be written as a hierarchical logit model

$$P(y_{ij} = 1) = \text{logit}^{-1}(\beta_j \theta_i - \alpha_j),$$

where  $\beta_j$  is the ability of vote  $j$  to discriminate between the legislators  $\theta$ , and  $\frac{\alpha_j}{\beta_j}$  indicates the location of the indifference-point between the “yes” and “no” alternatives on vote  $j$ .  $\theta_i$  is legislator  $i$ 's ideal point.

Consider two legislators, L and R with ideal points,  $\theta_L$  and  $\theta_R$ . The larger the difference between  $\theta_L$  and  $\theta_R$  the less frequently they vote together. When  $\beta_j$  is different from zero, vote  $j$  is able to separate legislators on the estimated dimension. The larger the difference from zero, the better is the vote at separating legislators. The cut-point on vote  $j$ ,  $\frac{\alpha_j}{\beta_j}$ , is equally far from the “yes” and “no” alternatives. This point can be of substantive interest as it separates those that prefer the “yes” alternative from those who prefer the “no” alternative. Proposals with low  $\frac{\alpha_j}{\beta_j}$  separate between legislators with low  $\theta$ , while proposals with high  $\frac{\alpha_j}{\beta_j}$  separate between legislators with high  $\theta$ . Hence, if proposal  $j$  has a strictly positive  $\beta$ , with  $\frac{\alpha_j}{\beta_j}$  equal to 1, it means that legislators located above 1 are likely to support the proposal while legislators located below 1 are likely to vote against.

Clinton et al. (2004) and Clinton and Jackman (2009) demonstrate how this framework can be extended beyond the standard model. The main advantage of incorporating procedural and party effects in statistical models is that these effects can be tested directly, rather than resorting to a two-stage approach of first estimating the standard model and then using these estimates as variables in subsequent analysis.

There are two key problems with the two-stage approach. The first is theoretical, the second is statistical. The theoretical problem is that the model used to generate the ideal points assumes no party effects, yet these estimates are subsequently used to test for party effects. The statistical problem with the two-stage approach is the failure to properly account for uncertainty in the estimates (see Clinton, 2007).

I add  $\gamma_i$  to the standard model. This is a legislator specific term that captures the difference in the ideal point of legislator  $i$  on votes in the second procedure relative to the ideal point in the first procedure. This allows me to measure the procedure-specific effects that influence voting behaviour, such as the need to find an absolute majority in order to amend the common position of the Council of Ministers, or differences in the content of the issues voted on. If parties are important, they should be able to make their rank-and-file members alter their voting behaviour on specific votes. In the spatial framework, Clinton et al. (2004) label this a two-cut-point party inducement model. A vote-specific party inducement adds a non-zero term  $\delta_{kj}$  to  $\alpha_j$ , with the aim of moving legislators from party  $k$  from one side of the indifference point to the other. As it is only possible to estimate difference in the level of party inducements across votes, this approach requires the identification of a set of votes where party pressure can be assumed to be negligible. In the US setting, the standard approach has been to compare lop-sided with non-lop-sided votes (see for example Snyder and Groseclose, 2000). As there is no need to instruct legislators on inconsequential votes, another option is to assume that the inconsequential votes are free of party inducements, while parties may offer vote-specific inducements on consequential votes.

For the inconsequential votes, I estimate the standard model

$$y_{ij} = \text{logit}^{-1}(\beta_j \theta_i - a_j).$$

For the consequential votes, I add  $k - 1$  vote-specific  $\delta_{jk}$  terms where  $k$  is the number of parties. The equation

$$y_{ij} = \text{logit}^{-1}(\beta_j(\theta_i + \gamma_i) - (a_j + \delta_{jk}))$$

allows us to estimate the extent of vote-specific party inducements and change in ideal points across procedures. Note that  $\theta_i$  appears in both equations.<sup>3</sup>

## Data and Estimation

In order to address whether it is defensible to ignore procedural effects and party inducements on consequential votes, I selected all 2<sup>nd</sup> reading codecision amendments (n = 403) and a sample of resolution votes (n = 450) from the Hix, Noury and Roland roll call data-set from the 5<sup>th</sup> European Parliament (Hix et al., 2006, 2007). I dropped all votes with fewer than 25 MEPs on the losing side, and all MEPs participating in fewer than 100 votes. This results in 359 resolution votes and 354 2<sup>nd</sup> reading codecision amendments for 659 MEPs. I estimate two different models. The first model is the standard model. It forms a baseline for evaluating the magnitude of the consequences of ignoring procedural effect and party inducements. The second model allows MEPs to hold procedure-specific positions and MEPs to follow party-group-specific voting instructions on codecision amendments.

The models are programmed in JAGS/BUGS ( for an introduction to Bayesian models in JAGS/BUGS, see Gelman et al., 2004; Gelman and Hill, 2007; Gill, 2008; Jackman, 2009; Ntzoufras, 2009). As with all Bayesian models, it is necessary to specify the prior beliefs about the parameters in the model. As a measure of precaution, I used weakly informative priors centred around zero. If the data contains little information, such priors draw the parameter estimates towards zero. The priors are as follows:  $\alpha_j \sim \mathcal{N}(0, 1)$ ,  $\beta_i \sim \mathcal{N}(0, 1)$ ,  $\delta_{kj} \sim \mathcal{N}(0, 1)$ ,  $\gamma_i \sim \mathcal{N}(0, 1)$  and  $\theta_i \sim \mathcal{N}(0, 1)$ .

For both models, I ran one chain for 125 000 iterations and discarded the first 25 000 iterations. Due to the large number of parameters in the models, I kept the results of every 20<sup>th</sup> iteration, which gave me 5000 samples from the posterior distribution. The models were initiated with all MEPs from the far left party group (GUE/NGL) at -1 and all British members of the Christian Democratic / Conservative party group (EPP-ED) at +1.<sup>4</sup> The other MEPs are initiated at 0. This initiation ensured that the direction was the same in both models, but this does not guarantee that the estimates are on the same scale. Note further that these MEPs were only initiated at these values. No MEP was constrained at any particular value.

The resulting samples show no sign of problematic auto-correlation or indications of non-convergence. Figure 1 shows the z-values for the Geweke (1992) convergence test.

The test compares the first 10 per cent of the samples with the last 50 per cent by calculating the difference in the sample means divided by their estimated standard errors. The figure groups the parameters by type. The upper row plots the density of Geweke test statistics for the parameters in the standard model. The middle row plots the corresponding parameters for the procedure and party inducements model. The lower row plots the test statistics for the vote-specific party effects. The figure shows no indication of non-convergence. Similar results are obtained from the Heidelberger (1983) convergence test, which compares the confidence intervals of the means for different proportions of the sample.

[Figure 1 about here.]

## Results

When comparing across procedures it is illustrative to first present agreement scores. There is a key difference between absolute and relative agreement scores. While the relative agreement scores increase as the parliament as a whole becomes more divided, the absolute agreement scores are not affected by the the cohesiveness of the parliament as a whole. Figure 2 shows the results of the absolute agreement scores for the sample of resolution votes and the 2<sup>nd</sup> reading codecision amendments by party. The score is calculated on a vote-by-vote basis. The figure plots the density of the agreement scores. The black line represents resolution votes. The grey line represents 2<sup>nd</sup> reading codecision votes. The figure shows that all parties except ELDR and UEN are more cohesive on 2<sup>nd</sup> reading codecision amendments than on resolution votes.<sup>5</sup> The difference is clearest amongst the EPP, V/ALE and GUE/NGL. PES is only marginally more cohesive on 2<sup>nd</sup> reading codecision amendments than on resolutions. Note that these results are almost opposite to the results from the relative agreement scores (Hix et al., 2007, 87 –131).

[Figure 2 about here.]

The standard one-dimensional model fits the data well. Fewer than 10 per cent of the  $\beta$ s have 95 per cent credibility intervals that overlap zero. The overall correlation in the estimated ideal points between the standard model and the party pressure model

is high. It is above .983 on resolution votes and above .958 on 2<sup>nd</sup> reading codecision votes. The correlation between resolutions and 2<sup>nd</sup> reading codecision votes in the party pressure model is above .968. Note however that this picture falls apart when within-party correlation is investigated. Although the correlation between the estimated ideal point on resolution votes and 2<sup>nd</sup> reading codecision votes is above .964 within the EPP, it is below .654 within the PES and just above .532 within the ELDR. Furthermore, within the V/ALE the correlation is just .475. For the NGL/GUE the within-party correlation in ideal points is above .821. For MEPs from UEN, there is hardly any within-party-correlation at all, only .084. If the motivation for using ideal-point estimates is to obtain individual-level estimates of revealed positions, there is a real risk that those estimates will be highly contingent on the characteristics of the votes used in the aggregation of those scores.

[Table 1 about here.]

Table 1 shows an investigation of the 95 per cent credibility interval of the  $\gamma$ s (the difference in the estimated ideal points across the two procedures). The table reveals that 35 per cent of the MEPs take up different positions on 2<sup>nd</sup> reading codecision votes compared to resolutions. The pattern varies across and within party groups. While 68 per cent of the MEPs from GUE/NGL and 61 per cent of the MEPs from ELDR adopt procedure-specific positions, the figures are 32 per cent for the MEPs from EPP and 29 per cent for MEPs from PES. Only 16 per cent of MEPs for V/ALE adopt procedure-specific ideal points. Focusing on the main national delegations within the three biggest parties (EPP, PES and ELDR) and starting with the British delegation, the results show that more than 97 per cent of the MEPs from the Conservative party and 91 per cent from the liberal party change their position, while only 7 per cent of the MEPs from the labour party do. Of the MEPs from the Conservative Party that change their position, all move further to the right.

In the French delegation, one may note that all of the French socialists have procedural-specific ideal points while only 12 per cent of the French members of EPP adopt procedural-specific positions. 78 per cent of the Italian MEPs from the ELDR adopt procedural-specific positions while only 22 per cent of the MEPs from the EPP do the same. None

of the social democrats did. In the Spanish delegation, 19 per cent of the MEPs from the EPP, 40 per cent of the MEPs from the ELDR and only 8 per cent of the MEPs from PES adopt procedure-specific positions. Contrast this with the MEPs from the German delegation. Hardly any German MEP changes position between procedures.

[Figure 3 about here.]

Figure 3 shows the estimated ideal points of MEPs in the standard model (left), the model allowing for party influence and procedural differences for both resolutions (centre), and 2<sup>nd</sup> reading codecision amendments (right). The MEPs are sorted on their estimated mean ideal points in the standard model. The grey area shows the 50 per cent central tendency of the estimated ideal point, the black area covers the 95 per cent credibility interval. The plot would be identical in the case of neither procedural effects nor vote-specific party inducements. While the estimates from the standard model are not directly comparable with the estimates from the procedure and party inducement model they nevertheless give us some indications. There are some minor alterations from the standard model to the estimates from the resolution votes, but substantial differences between these two sets of estimates and the estimates from the codecision votes. On codecision votes, a group of MEPs from PES place themselves between the Greens and the rest of the PES. Note that in neither the standard model nor in the estimates from the resolution votes, do we find this pattern amongst the MEPs from PES. That suggests that some MEPs from PES alter their voting behaviour on 2<sup>nd</sup> reading codecision votes to reflect a position further to the left. In fact, these MEPs are more in line with the V/ALE and EUL/NGL than the rest of the PES on 2<sup>nd</sup> reading codecision votes. The strong cohesion amongst MEPs from the PES reported in aggregated studies is not representative of their voting behaviour on 2<sup>nd</sup> reading codecision votes. Similarly, in the ELDR, there is a group of MEPs that locate themselves substantively further to the left on 2<sup>nd</sup> reading codecision votes than on resolutions. These MEPs become statistically indistinguishable from the PES on 2<sup>nd</sup> reading codecision votes. There is more variation amongst MEPs from the EPP on codecision votes. Within this group, MEPs change their behaviour to reflect a position consistent with an ideal point further to the right. Finally, one may note that the MEPs from the British delegation of the EPP are further removed from the rest of

the party group in this model compared to the standard model.

There may be at least two reasons for the difference in the positions on resolutions and 2<sup>nd</sup> reading codecision votes. First, possibly due to the difference in the control of the agenda, the cut-points may separate at different places on the latent dimension for resolution votes compared to 2<sup>nd</sup> reading codecision votes. Figure 4 i compares the estimated cutpoints on votes from the two procedures using the standard model. The grey area shows the 50 per cent central tendency and the black area covers the 95 per cent credibility interval of the estimate of the cutpoint.

[Figure 4 about here.]

While the two plots are clearly not identical, they fail to demonstrate that the cut-points are radically different across the procedures. It is nevertheless possible to note some differences. First, there are clearly more cut-points located fairly far to the right, separating the British delegation to the EPP from the rest. Second, in the area where most of the MEPs from EPP are located, there are hardly any cut-points at all. Note also that there is a clearer concentration of votes just to the left of the PES on resolution votes than on codecision votes. This suggests that when it comes to resolution votes, the leaders of the main parties are able to control the agenda sufficiently to avoid many divisive roll call votes. They are less able to avoid divisive roll call votes on 2<sup>nd</sup> reading codecision votes.

Figure 5 shows the party-specific cut-points on these votes against the position of the MEPs from the different parties. This allows us to investigate to what extent MEPs are more firmly guided by their party in their voting behaviour on 2<sup>nd</sup> reading codecision votes. Poorly estimated cut-points are excluded from the figure.<sup>6</sup> From top left to bottom right, the party-specific cut-points and the histograms of the position of the MEPs from the party groups are plotted. The size of the histograms reflects the size of the party groups.

[Figure 5 about here.]

The combination of the location of the 2<sup>nd</sup> reading amendments and the effect of the voting instructions provided by the GUE/NGL place them to the left of their cut-points

on almost all of the votes. As GUE/NGL is the reference category, it is not possible to estimate the effect of their voting instructions independently. Nevertheless, the location of their members relative to the cut-points should make the MEPs' voting decision easy for most of the amendments. Moving on to the V/ALE, one may note that the distribution of the cut-points differ from that of the GUE/NGL. While the majority of the cut-points are clearly to the right of their MEPs, there is a non-neglectible proportion of cut-points to the left of the group.

The situation is different for the PES. About half of all cut-points are to the right of the PES, while almost all other cut-points are located such that members of the PES risk finding themselves on opposite sides of the party-specific cut-point. While the PES is able to move the cut-points to the left of the majority of the party group on most of these votes, there is a minority within the party group on the other side.

The UEN does not seem to spend a lot of effort on preventing the party from splitting on 2<sup>nd</sup> reading codecision votes if the cut-point happen to be located in the interior of the party group's location.

The EPP seems to attempt to move most of the cut-points to the left of the party group, separating them from the likes of ELDR and PES. However, several votes split the EPP down the middle. Unlike on resolutions, there are few 2<sup>nd</sup> reading codecision votes that clearly separates the British delegation of the EPP from the rest of the party group. The reason why most MEPs of the British Conservative Party are estimated to take up a more extreme position on 2<sup>nd</sup> reading codecision amendments may thus be technical. No codecision vote has a cut-point so far to the right that these MEPs are to the left of it.

PES makes most use of vote-specific inducements on 2<sup>nd</sup> reading codecision amendment roll call votes. The estimates show that PES issued vote-specific inducements on 258 of 354 of the votes (72.9 per cent). On one-third of these votes, V/ALE requested the roll call. Of the 108 roll call votes where the rapporteur came from the EPP, there is evidence of PES inducements on 89 (82.4 per cent).

ELDR is the second most frequent user, applying vote-specific inducements on 232 of the 354 votes (65 per cent). The ELDR requested the roll call on only 9 of those votes. Most of the roll calls on these votes were requested by V/ALE. There is V/ALE

inducements on more than 70 per cent of the votes where ELDR issue inducements. The EPP or the PES had the rapporteur on two thirds of those votes. It is therefore not surprising that there is evidence of EPP inducements on 131 of these votes and PES inducements on 202 of these 230 votes.

EPP uses vote-specific inducements on just over half of the 2<sup>nd</sup> reading codecision amendment votes, 198 out of 354, or 55.9 per cent. Of these votes, there are inducements from PES on 141 votes (71 per cent), and ELDR inducements on 131 votes (66 per cent). Of the 108 roll calls taken on legislation where the rapporteur came from the EPP, there is EPP inducements on 64 (59 per cent). The EPP is almost equally active when the rapporteur is from PES, supplying inducements on 63 of the 120 votes (52.5 per cent).

On 188 out of 354 (53 per cent) votes, there is evidence of V/ALE inducements. V/ALE requested most of the roll calls on 2<sup>nd</sup> reading codecision votes, 116 of 354, just under one third of the roll calls. 47 of these roll calls were on environmental legislation. V/ALE inducements occur on only 18 of those 47 votes (38 per cent). Interestingly, there is party inducements from the EPP on 39 of 47 of the votes on environmental legislation (83 per cent).

Overall, this suggests that the main party groups are particularly active in attempting to induce the desired voting behaviour from their members when they either have the rapporteur themselves, or when the rapporteur is from the other main party. When the ELDR supplies vote-specific inducements, it is likely that the two main parties also try to influence the voting behaviour of their members. These votes are just as likely to meet the absolute majority requirement as any of the other 2<sup>nd</sup> reading roll call votes. In fact, only 10 of these 113 votes (8.8 per cent) passed the absolute majority requirement. This compares to 31 out of the 354 (also 8.8 per cent) overall, and 4 out of the 27 votes where neither of the 3 main party groups supplied any inducements. Of the 141 votes where both the EPP and PES supplied inducements, only 13 (9.2 per cent) passed the absolute majority requirement. Party inducements are not associated with an increased chance of successful amendments to the common position of the Council of Ministers.

## Summary

It is well known that roll call votes in the European Parliament are unrepresentative of all votes due to selection effects. I have shown that voting behaviour on roll call votes differ by procedure and find evidence of vote-specific party inducements on legislative votes. The standard model used to analyse voting behaviour in the EP assumes away such effects. My results question the validity of some of the conclusions reached in existing work on roll call voting in the European Parliament. As the sincere voting assumption of the standard voting model is unlikely in the case of roll call voting in the European Parliament, researchers are well advised to incorporate more realistic behaviour assumptions into their statistical models.

The results show that the different ideal point estimates of the British delegation to the EPP and the rest of the party are due to different voting behaviour on both resolutions and 2<sup>nd</sup> reading codecision votes. In fact, the difference is larger on codecision votes than on resolution votes. On resolutions, a non-negligible set of cut-points separates the British delegation from the rest of the party. On codecision, many votes split the moderate part of the EPP away from the majority of the party, while hardly any of these votes have cut-points that are located such that they put an upper bound on the procedure-specific position of the British delegation to the EPP. One may therefore argue that the difference between the British delegation and the rest of the EPP was both symbolic and substantive during the 5<sup>th</sup> EP.

The case of the PES is different. Here, the aggregated results show little evidence of a within-party split. However, when allowing MEPs to adopt procedural-specific positions and account for party-specific vote inducements, the results show that the French socialists adopt a position that is more in line with the leftist GUE/NGL than the rest of the PES. This finding has not been reported in existing studies of roll call voting in the EP. The failure to find this difference is probably due to the standard approach of pooling the votes across all procedures.

These findings demonstrate the value of investigating specific subsets of votes as ideal points estimates do differ across procedures. Failure to account for procedural differences may generate biased ideal points. As voting on resolutions may be more about

position-taking and voting on codecision directives more about decision-making, failure to distinguish the two may lead researchers to draw invalid conclusions about politics in the European Parliament. Research on voting behaviour in the EP is often motivated by the increase in its legislative power, it is thus essential that researchers are careful to use votes that are relevant for this purpose. When studying voting in the EP, researchers will benefit from testing more appropriate models of legislative voting, taking account of both selection effects resulting from the fact that the decision to record a vote may be strategic (Hug, 2010) and the interaction between the EP and the Council of Ministers (Hagemann and Høyland, 2010).

Future research may benefit from the fact that the new EP rules of procedure make roll-call compulsory in all final legislative votes. This allows researchers to test to what extent coalition formation and defection on these votes differ from roll call votes requested by party groups. Once we have sufficient votes, we will be able to evaluate the the magnitude of the effect of requesting roll-call votes in the EP.

# Notes

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<sup>2</sup>In the following, party means party group.

<sup>3</sup>It is possible to extend the model in various other directions, for example by modeling agenda effects (Clinton and Meriowitz, 2001; Clinton and Meirowitz, 2003) the evolution of ideal-points over time (Martin and Quinn, 2002), or characteristics of constituencies and parties (Clinton and Jackman, 2009).

<sup>4</sup>The transnational party-groups in the 5<sup>th</sup> EP were, GUE/NGL (Far left), V/ALE (Greens and regionalists), PES (Social democrats), ELDR (Liberal and reformist), UEN (Gaullists), EPP-ED (Christian Democrats and Conservative), EDD (Euro-sceptics) and independent.

<sup>5</sup>The Eurosceptic and independent are excluded from the figure.

<sup>6</sup>This is defined as those with a difference between the 2.5 per cent and 97.5 per cent estimate above 5.

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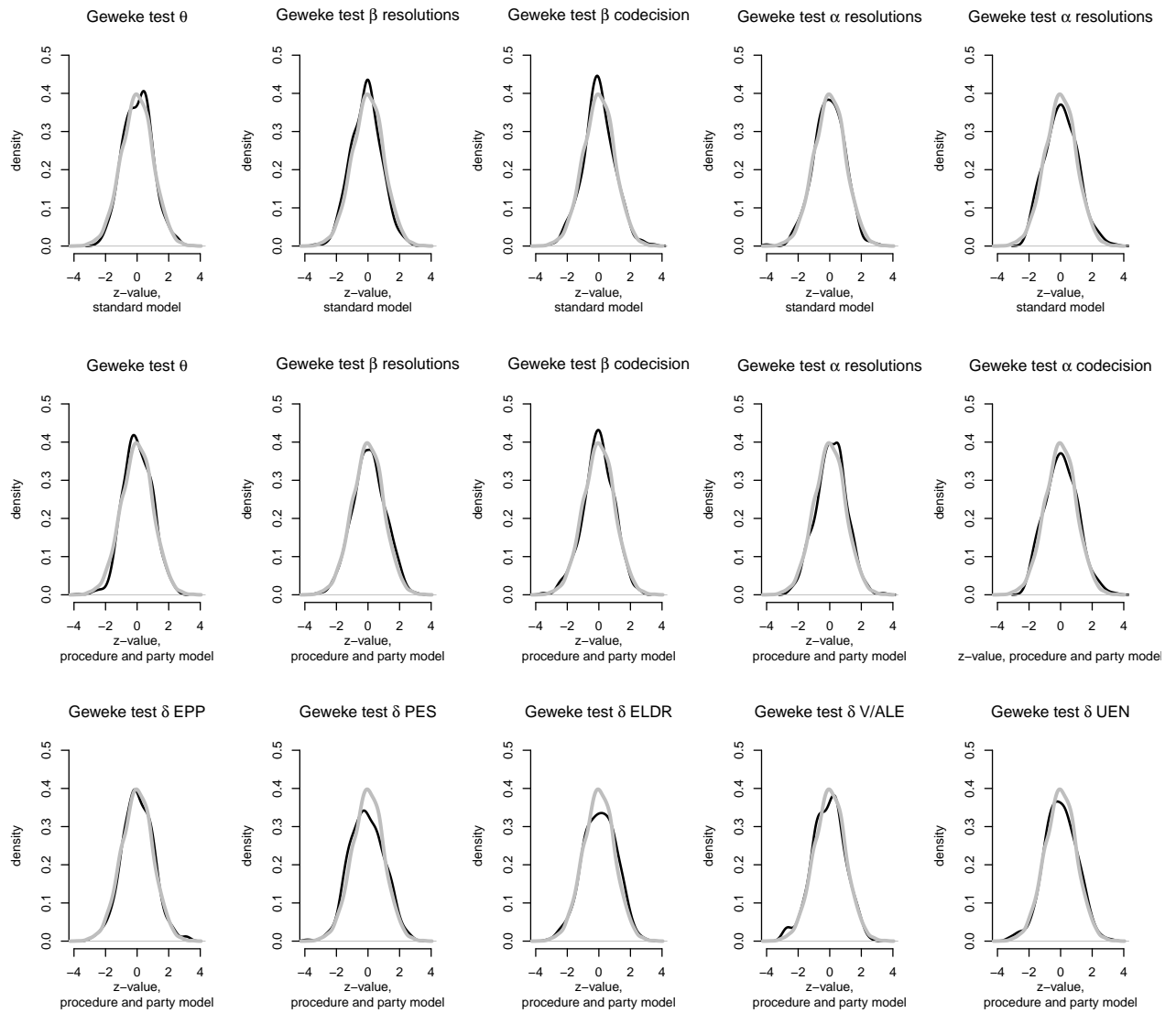


Figure 1: Geweke convergence test statistics. The black line is the distribution of the z-scores. The grey line is the standard normal distribution.

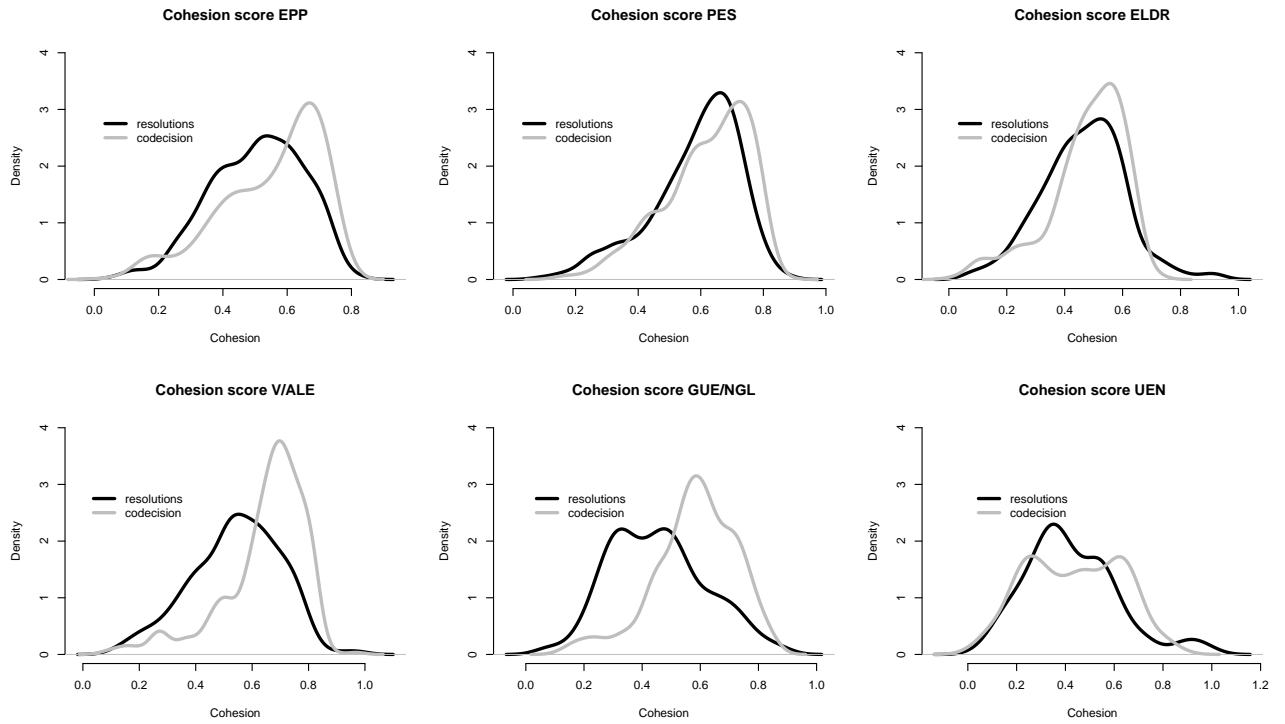


Figure 2: Plot of agreement score index by party and procedure.

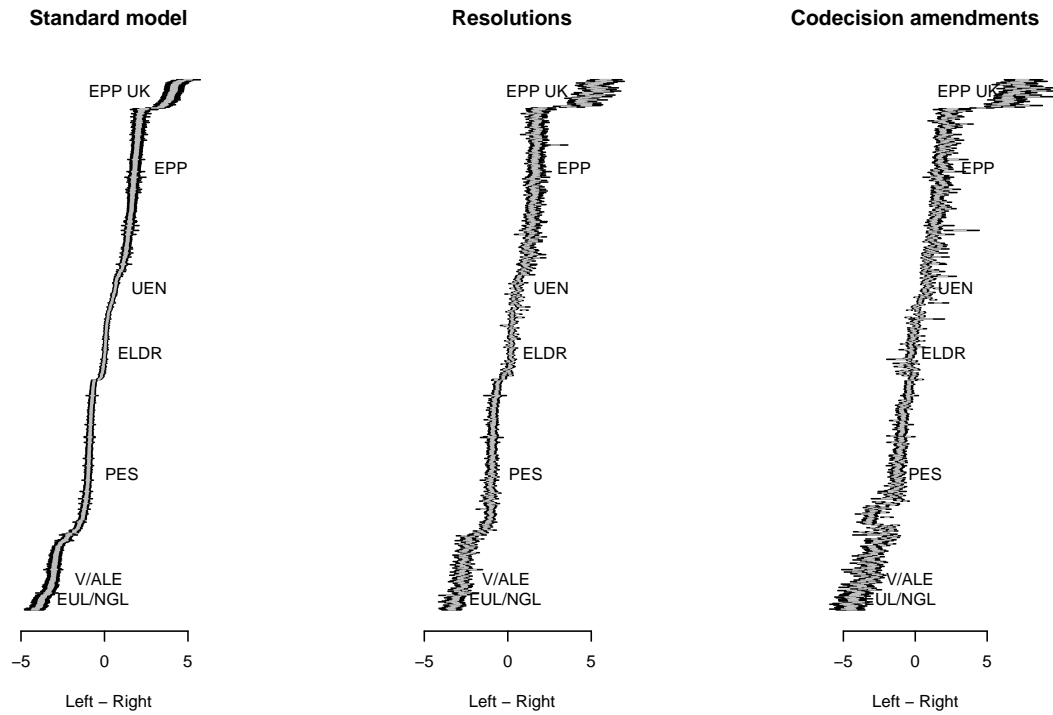


Figure 3: Standard model: estimated ideal point,(left); Procedure and party inducements model: estimated ideal points on resolutions (middle); Procedure and party inducements model: estimated ideal points on  $2^{nd}$  reading codecision votes (right). The grey area covers the 50 per cent central tendency. The black area covers the 95 per cent credibility interval.

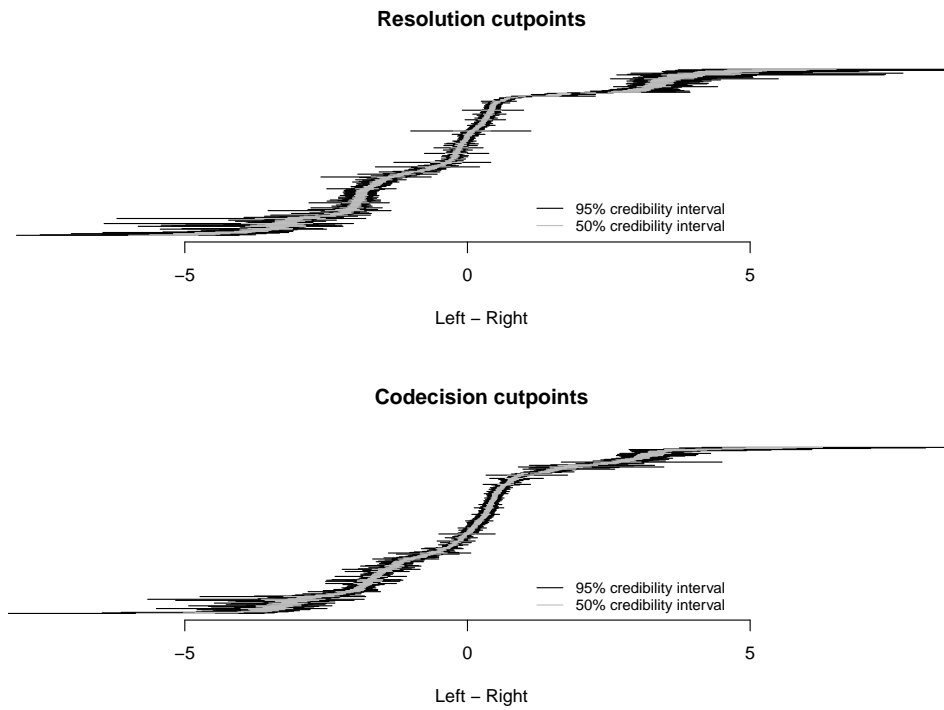


Figure 4: The figure show the cut-points for resolutions (upper) and  $2^{nd}$  reading codecision votes (lower).

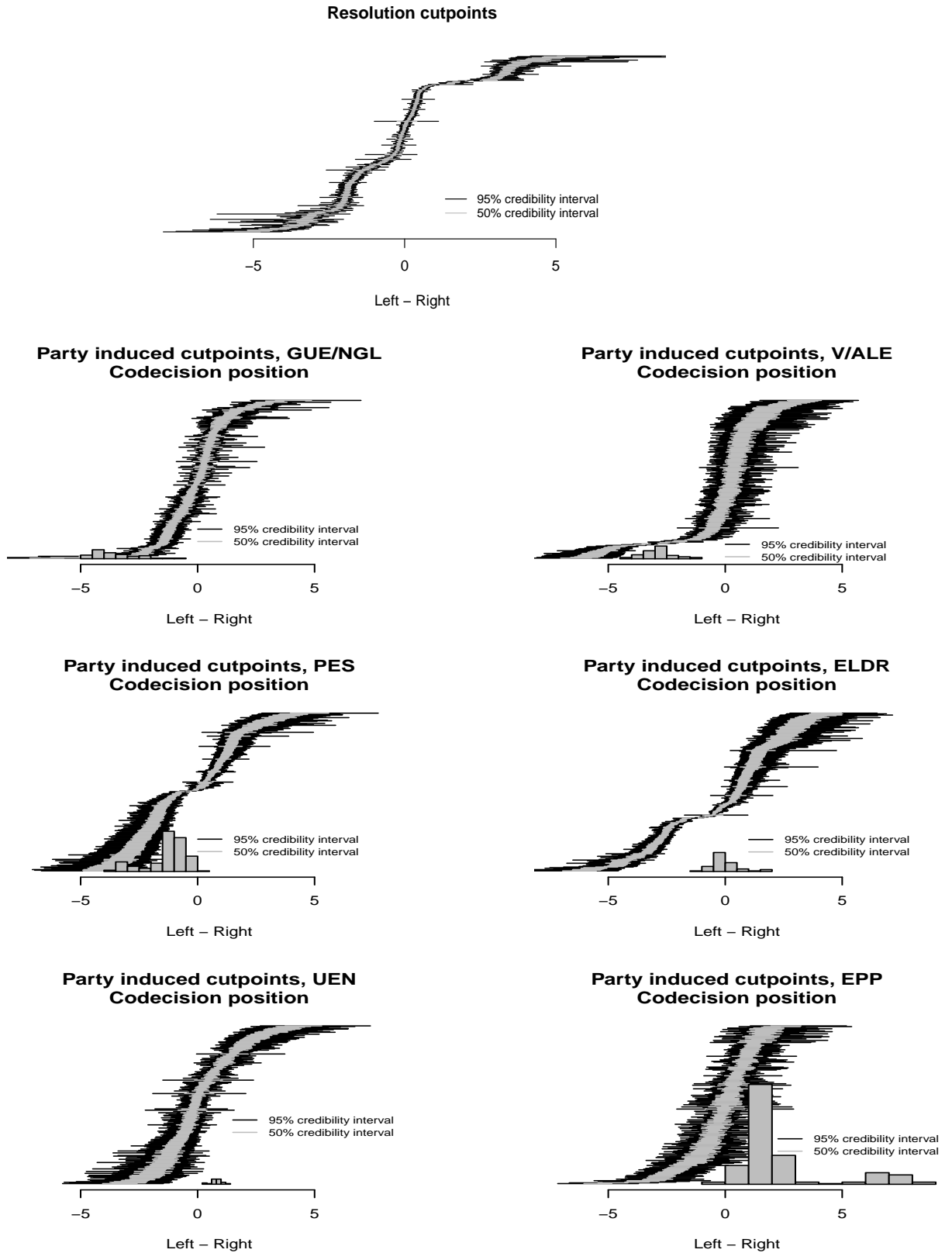


Figure 5: The top sub-figure shows the cut-points on resolutions, as estimated in the procedure and vote-specific party inducement model. The other sub-figures show the party-specific cut-points on 2<sup>nd</sup> reading codecision votes. The histograms show the location of the parties.

	No change	Change	Proportion	UK	Germany	France	Italy	Spain
EDD	11	6	0.35	0.00		0.22		
EPP	167	79	0.32	0.97	0.04	0.12	0.22	0.19
UEN	16	7	0.30			0.00	0.10	
ELDR	24	37	0.61	0.91		0.00	0.78	0.40
GUE/NGL	16	34	0.68		0.14	0.64	0.83	1.00
Non-attached	18	11	0.38	1.00		0.00	0.30	1.00
PES	131	53	0.29	0.07	0.11	1.00	0.00	0.08
V/ALE	41	8	0.16	0.33	0.00	0.44	0.00	0.17
All	424	235	.357					

Table 1: Procedural-specific ideal points,  $\gamma \neq 0$ .