Party Group Cohesion in the European Parliament
Tracing the Bias in Roll Call Votes

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Abstract

To understand legislative behaviour and party politics in the European Parliament (EP), scholars to date have heavily relied on roll-call vote (RCV) data. However, only a subset of all EP votes is taken by roll call. Furthermore, it has been argued that EP party groups may be requesting RCVs for strategic reasons. This can lead to a selection bias in the data and, consequently, wrong findings such as overestimated party group cohesion. Researchers have put forward alternative hypotheses about how voting cohesion might differ between recorded and non-recorded votes as a result of party signalling or disciplining (Carrubba et al. 2006; Carrubba, Gabel and Hug 2008; Hug 2009; Thiem 2006). In this paper, we test these partially conflicting hypotheses and offer a mixed motive explanation. We rely on new data and draw on the fact that since the EP rule revisions in June 2009 all final legislative votes are automatically taken by roll-call. Thus, the selection bias that might have affected former analyses disappeared for final legislative votes. We compare pre and post 2009 voting records, which enables us to trace the revealed level of party group cohesion. The analysis shows that the relative cohesion of party groups on final legislative votes has on average increased after the EP rule revision. This indicates that relying on RCVs can lead to underestimating rather than overestimating group cohesion – a finding that contradicts previous hypotheses.

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1 Introduction

A lot of our knowledge about legislative behaviour, party group cohesion and inter-party group competition, as well as the dimensionality of conflict in the European Parliament (EP), is based on roll call vote (RCV) data. Yet, scholars have raised concerns about the potential bias in roll call votes that can heavily distort our findings (Carrubba et al. 2006; Gabel and Carrubba 2004). Two alternative disciplining (Carrubba, Gabel and Hug 2008) and signalling (Thiem 2006) theoretical explanations have been proposed in the recent years, considering the potential sources of bias in RCV data and the impact of such a bias on the level of observed party group cohesion. Yet, empirical evaluations of these models in the EP are still scarce (but see Carrubba, Gabel and Hug 2009; Finke and Thiem 2010; Hug 2011). This is not surprising given the inherent difficulty, or rather impossibility, of estimating party group cohesion on the votes that are not taken by roll call.

In this paper we take advantage of a recent change in the EP Rules of Procedure in 2009, according to which all final legislative votes have to be RCVs. Thus, the bias in the measures of party group cohesion has disappeared for these final votes. We exploit this development to compare party group cohesion on amendment and final votes before and after the rule change in order to evaluate the main hypothesized causes of overestimation of group cohesion estimates in the literature, as well as an alternative explanation of mixed motives we offer here. Firstly, we explore the disciplining model, postulating that party group leaders request RCVs to discipline their members. It leads us to expect on average a decrease in party group cohesion on final legislative votes after the 2009 rule change because group leaders can no longer call a roll call on such votes to emphasize the importance of a vote to the group, make group members feel closely watched and, thus, disciplining them into voting according to the group line. Secondly, we examine the signalling model proposition that party groups request strategically RCVs to signal their already highly cohesive position on an issue to external audiences (Thiem 2006). Thus, while during the the 6th EP on all RCVs at least the requesting group(s) was always highly cohesive, after the rule change also votes on which no group would have requested a RCV, having a cohesive position it wanted to signal, now have to be taken by roll call. This implies that group cohesion should have, on average, decreased on final legislative votes. Finally, we confront these established models with an alternative explanation of when a RCV is requested, namely whenever the vote is ‘important’ or ‘salient’ for a party group, which could be for a mix of reasons. If this explanation holds, cohesion on final legislative votes should have increased now that all of them have to be taken by roll call and not only those, which at least one party group deemed important.
To test the hypotheses, we have combined data on all legislative votes in the 6th and the 7th EP (until December 2010) collected by Hix, Noury and Roland (2007) with data we collected ourselves from the EP plenary minutes and the parliamentary Legislative Observatory. The result of our statistical analysis demonstrate that indeed cohesion has increased on legislative votes in the 13th EP term, and significantly more so on final than on amendment votes. This finding provides evidence against both the disciplining and the signalling models of party group cohesion, which lead us to expect a decrease in cohesion on final legislative votes. However, it offers support for our alternative hypothesis which accounts for this increase in cohesion with the fact that RCVs are no longer specifically requested but are mandatory on all final legislative votes, and, therefore, include a lot of votes that no group would have considered important enough as to request a roll call on them. Additionally, the more roll call votes a group requests on a legislative proposal, which we link to the level of importance a group attaches to a proposal, the less likely it is to be cohesive on any of the RCV on this proposal. Furthermore, we do not find that a party group tends to be more cohesive whenever it requested the roll call vote but exactly the opposite in contrast to the signalling theory predictions.

These findings offer optimistic evaluation of the purported overestimation of party group cohesion in RCVs. If anything, the bias seems to go in the opposite direction. Party groups appear to be less cohesive on requested RCVs than on mandatory RCVs. We argued that this is because a roll call is requested on a vote if at least one party group considers it as important, suggesting that this may be a contentious vote. Mandatory RCVs, instead, include also trivial votes, which no party group would have considered as important enough as to request the roll call.

We proceed as follows. First we offer a short background on party groups and voting in the EP, and present the current state of the art. We then outline the main presumed sources of bias in party group cohesion that have been identified in the literature. Thereafter, we form predictions on the impact of the 2009 EP rule change on the observed group cohesion based on the disciplining and signalling models and present an alternative explanation based on the level of importance of requested RCVs, which we call ‘mixed motives’ model. The subsequent section offers an empirical evaluation of these predictions and we finish with some conclusions.
2 Background and motivation

2.1 Party groups and plenary voting

The transnational groups form the “backbone” of the EP’s internal organization (Raunio 1997, p. 45). They were officially established in the Common Assembly of the European Coal and Steel Community (ECSC) in 1953. Group formation at that time could as well have taken part along national lines. However, to prevent national viewpoints from becoming too dominant, it was decided by the representatives that it should occur according to ideological affinities (Raunio 1997, p. 44). The EP’s Rules of Procedure stipulate a certain threshold (which has been changing over time) that an alliance of MEPs needs to meet in order to gain recognition as a party group. At the moment, the minimum number of MEPs required to form a group is 25 and they have to represent at least one quarter of the EU member states (Corbett, Jacobs and Shackleton 2011, p. 76).

Groups are decisive in building legislative majorities. Besides, they have been given several tasks: they play a vital role in appointing MEPs to important positions within the EP (such as President, Vice Presidents, committee chairs, and rapporteurs); they set the parliamentary agenda albeit constrained by the legislative proposals of the European Commission; and they decide on the allocation of speaking time in the plenary. To fulfil all these tasks, they have their own staff and financial resources in proportion to their size. As a result, independent MEPs who do not belong to any group are more or less excluded from parliamentary activities, while the large groups, especially the European People’s Party (EPP) and the Socialist Group (PES) are very powerful (Hix and Hoyland 2011, p. 56).

Group influence on legislation already starts at the committee stage. Each group has a spokesperson in each committee, who articulates the group position, and a coordinator, who functions as a whip. Once it is decided which group gets the rapporteur on a certain legislative proposal, the other groups appoint shadow rapporteurs who will also be responsible for this dossier. Under the leadership of the rapporteur or shadow rapporteur, the group members within the committee try to form a common position. Then, about one month before the plenary vote, the proposal is put on the agenda of a group meeting for discussion. In the meeting, the group decides (either consensually or by a majority vote) what position to take and whether to propose amendments to a given proposal. Finally, in the evening before the plenary vote on the proposal, the group puts together a “voting list”, indicating the group position (“Yes”, “No” or “Abstain”) for every item that will be voted on (there might be up to about 100 amendments to one Commission proposal coming from different groups, “split” votes on separate parts of the proposal or
an amendment, or “block” votes joining up several amendments). The voting list is also subject to a democratic decision-process within the group: individual members and national party delegations may voice concerns and announce that they intend to vote differently. Occasionally, if the whole group is divided over an issue, it is also possible that there will be a “free vote” on the respective item, meaning that there is no official group position and each MEP or delegation decides independently which way to vote. On the next day in the plenary, MEPs have the voting lists of their groups in front of them during the voting time. In addition, there is an MEP in every group who is leading the vote (thumbs up means that the group is supposed to vote “Yes”, thumbs down means “No”, and an extended arm means “Abstain”) Thus, group members generally follow these group signs like traffic lights and raise their hands accordingly, or, in the case of electronic votes or roll-call votes, push the respective buttons on their desks (Interviews 2, 7, 10, and 25, own observation of EP plenary).

There are three different modes of voting in the European Parliament’s plenary: voting by show of hands, electronic votes and RCVs. Voting by show of hands is the quickest way to vote and therefore used most often. MEPs simply raise their hands when asked whether they are in favor, against or want to abstain. The chair (the EP president or a substitute) announces whether there was a majority in favor of the proposal or not. If the vote is close and any MEP questions the outcome, an electronic vote is held. To vote this way, MEPs push the respective button on their desks and the exact number of Yes, No or Abstain votes is displayed on a board in the plenary. However, it is not made public which MEP voted which way. While also held electronically, in RCVs instead the voting behavior of each MEP is made public in the minutes of the plenary session. RCVs have so far been taken if requested in advance by at least one party group or 40 MEPs (37 in the past legislative term). Yet, the EP Rule of Procedure changed in 2009 and now require that all final legislative votes are taken by roll call (European Parliament 2009, Rule 166). It is this impact of this rule change on party group cohesion that we examine in this paper to explore alternative hypotheses about the impact of RCVs on the observed party group cohesion.

2.2 Literature on party group cohesion

Based on EP roll-call votes, scholars such as (Attinà 1990; Hix, Noury and Roland 2007; Kreppel and Tsebelis 1999; Raunio 1997) have detected that MEPs vote with the official party group line most of the time.\textsuperscript{1} Cohesion was found to be

\textsuperscript{1}The original data on voting in the EP was put together by a research team around Simon Hix, Abdul Noury and Gérard Roland. They collected data on all recorded votes from 1979
particularly high in the two big groups (Kreppel and Tsebelis 1999). In addition, Hix, Noury and Roland (2007, p. 94) discovered that group cohesion has risen steadily between 1994 and 2004. Even after enlargement, voting patterns have not changed, notwithstanding the fact that the ideological diversity of the groups has further increased as new national party delegations joined in the course of EU-enlargement (Hix and Noury 2009). Apparently, voting cohesion within the EP groups continues to grow (Votewatch N.d.). Despite the groups' strong role within the legislative process, these findings are puzzling since party group discipline at the EU level has been considered as rather weak and prone to ideological fractionalization in the past.

So, what is the underlying mechanism by which EP groups influence voting behavior of their MEPs and which leads to these high levels of cohesion? Scholars have tried to explain the high group cohesion in roll-call votes despite large ideological intra-group diversity in different ways. We distinguish between three main approaches: the “rational behavior”-, the “second principal”- and the “perceived preference coherence (PPC)”-approach. Following Downs (1957), cohesive group behavior can be considered as rational. In a large assembly like the EP, individual representatives would be hardly able to build winning coalitions on their own. Most national party delegations consist only of very few members and would thus not be much more able to do that than individual MEPs. Therefore, it is beneficial to join together with like-minded parliamentarians in transnational groups in order to secure collective policy aims. Groups are stronger if they are united but to ensure the success of their groups MEPs have to accept a certain degree of group discipline. With the rising powers of the EP, the stakes of parliamentary decisions grow and group discipline becomes even more beneficial (Hix et al. 2007: 88-91).

The second approach to explaining group cohesion draws on principal-agent theory. The fact that the transnational groups in the EP are the equivalent to party groups in national parliaments has led researchers to conceptualize groups as the ‘second principals’ of MEPs. MEPs are thus seen as agents of two principals. On the one hand, MEPs are responsible to their national parties at home. On the other hand, MEPs are subject to group discipline (Hix 2002, 2004). However, the disciplining mechanisms that EP groups have at their disposal are much weaker than those of national parties and might not really be suited to enforce cohesion

onwards. Their dataset contains information on whether an MEP voted ‘Yes’, ‘No’, or abstained, (or whether the MEP was present but did not vote, was absent, or was not an MEP at the time of the vote). The raw-data is available online. Based on these data, numerous studies have analyzed voting behavior of MEPs, the most extensive of these studies probably being (Hix, Noury and Roland 2007). For a study on the 6th EP, see for example Hix and Noury (2009). Initial findings on the 7th EP are presented in reports at (Votewatch N.d.).
Acknowledging this, Ringe (2010) developed a different explanatory model: the perceived preference coherence model. According to this model, the role of the groups in the decision-making procedure in the EP leads to a transnational party effect where cohesion is due to persuasion and coordination within the groups (Ringe 2010: 213).

2.3 Biased findings about group cohesion based on RCV?

However, there is also a fourth theory of why we observe such high levels of EPG cohesion – the findings might be biased upwards as the data on which they are based might be subject to a selection bias. As described above, party group cohesion estimates are based on the RCVs, which are recorded only for a fraction of all votes in the EP and furthermore do not occur at random. Instead, they are most often requested by one or more party group. This gives rise to the suspicion that RCVs may be called strategically by the groups, for example, to display a certain position or even to put pressure on own members to vote according to the group line. If these suspicions are true, there might be a selection bias, meaning that RCVs differ in their characteristics from the full population of votes. If RCVs are not representative of all votes, the findings based on RCVs would not representative, either.

The potential selection bias in EP RCVs has long been neglected. Carrubba et al. (2006) were the first to address it by analyzing the whole sample of votes taken in the EP between July 1999 and 2000. They found differences between party groups concerning their RCV requests with the EPP and the Greens asking most often for roll-calls. Furthermore, Carrubba et al. discovered that votes in some issue areas were much more often subject to roll-calls than in others. The bulk of RCVs in the period 1999-2000 were linked to subjects concerning Justice and Home Affairs, Constitutional Affairs, and Economic and Monetary Affairs. While these subjects together accounted for less than one third of all votes, they accounted for nearly two thirds of all RCVs. These issue areas were thus over-represented in RCVs. Finally, Carrubba et al. showed that legislative votes were massively under-represented. While around 50% of all votes on (non-legislative) resolutions became RCVs, only 7% of all votes on legislative proposals were held by roll-call. Based on these findings, Carrubba et al. argue that RCVs are subject to a selection bias. Furthermore, by assuming that EPGs use roll-calls strategically to enforce cohesion among their MEPs, they infer that RCV analysis overestimates cohesion within EPGs.
Especially this last point, the question whether EPG cohesion is higher in RCVs than it might be in votes that are not recorded, has raised further interest. Thiem (2006) investigated strategic reasons behind RCV requests. She theorized that party group leaders are motivated by one of the following: 1) disciplining their own MEPs, 2) publicly expressing a certain policy positions or 3) revealing the voting behavior of another EPG. Moreover, she studied the ability of party groups to sanction their members for divergent voting behavior. Finding that EPGs have nearly no means to sanction their members, she assumed that the high levels of EPG cohesion found in RCVs are due to the fact that party leaders only call RCVs on votes where they expect their MEPs to display a cohesive position so as to either express a certain policy position or reveal the divergent position of another EPG (Thiem 2006, Thiem 2007).

Carrubba et al. (2008) developed a game theoretical model of roll-call vote selection that offers testable predictions about the selection process and about a potential selection bias. Their model implies that the observed cohesion in roll-call votes depends on the size and heterogeneity of the parties and on the status quo. They also provided some initial empirical tests of their model (Carrubba et al. 2009). However, it is not possible to deduce a global conclusion of a bias in RCVs from their model, as their hypotheses relate only to very specific circumstances. Besides, even if we assume that EPG leaders request RCVs to discipline their rank-and file members, it cannot be concluded that EPG cohesion in RCVs will be higher than in non-RCVs. While on the one hand, the fact that voting behavior is recorded might force group members to stick to the common line, on the one hand, roll-call votes will take place mostly for decisions where group leaders feel that more discipline is needed (as they perceive group cohesion to be too low). Hence, there might be more cohesion in RCVs, less cohesion in RCVs, or, these two opposing effects might simply cancel each other out Hug (2009).

Håyland (2010) further demonstrates that results based on RCVs vary between legislative and non-legislative procedures. Therefore, it is particularly important not to mix legislative and non-legislative votes together. Otherwise, the over-representation of non-legislative votes in roll-calls might cause a bias.

In any case, considerable caution in the analysis of RCVs is necessary. To sum up, research on RCV request has shown that one needs to consider the following potential problems of data based on EP roll-calls:

- EPG cohesion might be over-estimated
- Some policy areas might be over-represented
- Legislative votes might be under-represented
In the present paper, we will focus on the last problem. The following section will describe the different hypotheses that have been raised in the literature concerning the potential over-estimation of EPG cohesion. Thereby, we will try to formalize the mechanisms that might lead to over-estimation, which we will test later by exploiting the change in the EP Rules of Procedure in 2009 that made mandatory the roll call on all final legislative votes.

3 Hypotheses

Hypotheses on whether and, if so, how, any bias in RCV data affects the observed group cohesion, are closely linked to the question why RCVs occur. As mentioned above, most RCVs have to be requested, which is usually done by one or more EP groups. Furthermore, it is likely that the groups do not call RCVs at random, but do so strategically. Scholars have thus put forward two main hypotheses. First, groups might call RCVs to discipline their own members. Second, groups might call RCVs to signal their own position. However, these two reasons might by far not be the only ones. Thus, thirdly, party groups could also call RCVs on votes that are ‘important’ for them for a mixture of different reasons. Below, we develop predictions on what each of these three hypotheses would lead us to expect regarding the level of observed party group cohesion on final legislative votes before and after the introduction of Rule 166 on mandatory RCV on all final legislative votes, i.e. in the 6th and the 7th EP.

3.1 Disciplining

We first turn to the rationale behind the disciplining hypothesis, promoted by Carrubba, Gabel and Hug (2008). One main goal of party groups is to ensure cohesive behaviour of their members. Without a certain degree of internal group voting cohesion, party groups cannot build parliamentary majorities and will therefore not achieve their preferred policies (Carey 2007). To enforce cohesion even in the case of divergent preferences, party groups need a set of ‘carrots and sticks’ with which they can reward loyal members and punish disloyal ones (Cox and McCubbins 2007). In the case of the EP groups, these ‘carrots and sticks’ consist mainly of different rights to distribute parliamentary resources and office. Furthermore, to discipline members in order to ensure cohesion, party groups can call a RCV. The reasoning behind that is that if MEPs know that their voting behaviour will be recorded and monitored they will be more likely to follow the group line.

The disciplining hypothesis is thus based on the following premise:
MEPs change their voting behaviour if a vote is held by roll-call, in which case they are more likely to vote with their party groups.

If this assumption were not true in the majority of cases and a RCV either did not affect the vote choice of MEPs or even inclined them to vote differently from the majority in their groups (e.g. with their national (party) delegations, instead), RCV requests by group leaders would be irrational.

This suggests that the observed cohesion in RCVs is always a function of the 'pre-disciplined' or a priori cohesion and the disciplining effect of the RCV itself:

\[
\text{Observed cohesion}_{ij} = \text{A priori cohesion}_{ij} + D_{ij},
\]

where \( D \) is the disciplining effect, \( i \) is the party group, and \( j \) is the item voted on.

However, one might even go one step further and assume that not all MEPs are equally disciplined by the fact that a vote is held by roll-call. MEPs know whether it was their own party group that requested the RCV, as this is indicated on the group’s voting list.\(^2\) Thus, while there might still be a disciplining effect for those MEPs that do not belong to the group(s) requesting the roll-call, this effect can be assumed to be stronger for the MEPs of the requesting group(s), as they know their group tries to discipline them.

The refined disciplining hypothesis is, thus, based on the following premises:

- MEPs change their voting behaviour if a vote is held by roll-call, in which case they are more likely to vote with their party groups.
- If a vote is held by roll-call, the MEPs of a party group that called the RCV are more likely to vote with their group than the MEPs of the other party groups.

The reasoning behind the second assumption we make is that MEPs know that their group leaders requested the RCV, which likely indicates an important for the group vote, and feel that they are closely watched.

This suggests the following relationship between observed and a priori cohesion for the group(s) requesting the RCV:

\[
\text{Observed cohesion}_{ij} = \text{A priori cohesion}_{ij} + D(\text{RCV})_{ij} + D(\text{RCV requester})_{ij}
\]

\(^2\)Personal interview with MEP (PSE), November 2009.
where $D(RCV)$ is the disciplining effect caused by the roll-call, $D(RCV \text{ requester})$ is the additional disciplining effect caused by the fact that the group requested the RCV, $i$ is a party group that called the RCV, and $j$ is the item voted on.

And a different relationship for the non-requesting groups:

$$\text{Observed cohesion}_{kj} = a \text{ priori Cohesion}_{kj} + D(RCV)_{kj}$$

where $D(RCV)$ is again the disciplining effect caused by the roll-call, $k$ is a party group that did not call the RCV on vote $j$.

To examine whether a disciplining effect or even our refined disciplining effect is exists, we compare voting cohesion on roll-calls on final legislative votes in EP6 (when RCVs were requested by party groups) and in EP7 (when the change in the EP’s rules of procedure made RCVs mandatory).

First, if there is a general disciplining effect for all party groups and not additional disciplining effect depending on which party group requested the RCV, we should observe it in both EP6 and EP7. However, to draw such a conclusion, we would need to assume that neither the a priori cohesion, nor the disciplining effect $D$ changes on average between EP6 and EP7, the average observed cohesion in EP6 should be the same as in EP7. These two assumptions are quite strong. Indeed, changes in the party group composition between the two parliaments render comparison difficult, as such changes might significantly affect the a priori cohesion.

To account for such changes, we control for cohesion on non-final votes (which are mostly amendments) and make a relative rather than absolute comparison.

Therefore, we do not need the strong assumptions above, but simply the assumption that if there are changes in the a priori cohesion or the disciplining effect, they apply to both final and non-final votes to the same extent.

The hypothesis for the comparison between EP6 and EP7 is then:

**Hypothesis 1.a (disciplining effect):**

$$\left( \frac{1}{n_l} \sum_l CF_{il} - \frac{1}{n_a} \sum_l \sum_{m=1}^{n_{al}} CA_{ilm} \right)_{EP6} = \left( \frac{1}{n_l} \sum_l CF_{il} - \frac{1}{n_a} \sum_l \sum_{m=1}^{n_{al}} CA_{ilm} \right)_{EP7}$$

where $CF_{il}$ is the observed cohesion of group $i$ on the final vote on proposal $l$, $CA_{ilm}$ is the observed cohesion of group $i$ on amendment $m$ on proposal $l$, $n_{al}$ is

\[\text{more specifically, we do also compare final votes and amendment votes on the same proposal:} \]

$$\frac{1}{n_{l,m}} \sum_{l,m} (CF_{il} - CA_{ilm}) \text{ (EP6)} = \frac{1}{n_{l,m}} \sum_{l,m} (CF_{il} - CA_{ilm}) \text{ (EP7)} \text{ (see t-test in section 4.3)}$$
the number of amendments on proposal \( l \) taken by RCV, \( n_a = \sum_l n_{al} \) is the total number of amendments, and \( n_l \) is the number of votes.

Second, to analyse the refined disciplining effect, we develop a different hypothesis. Due to the fact that RCVs on final legislative votes are mandatory in EP7 and not called by party groups any more, the additional disciplining that affects only the group(s) requesting the RCV does not exist anymore. Thus, the average cohesion on final votes (again after controlling for cohesion on amendments) should actually decrease in EP7 compared to EP6. This is because in EP6 not only the observed cohesion of the party groups should have been higher than their non-observed (a priori) cohesion but also the average observed cohesion of all party groups because for each RCV at least one party group must have requested it, thus further disciplining its members.

**Hypothesis 1.b (refined disciplining effect)** thus reads:

\[
\frac{1}{n_l} \sum_l (CF_{il} - \frac{1}{n_{l,m}} \sum_{l,m} CA_{ilm}) \text{ (EP6)} > \frac{1}{n_l} \sum_l (CF_{il} - \frac{1}{n_{l,m}} \sum_{l,m} CA_{ilm}) \text{ (EP7)}
\],

where \( CF_{il} \) is the observed cohesion of group \( i \) on the final vote on proposal \( l \), \( CA_{ilm} \) is the observed cohesion of group \( i \) on the amendments \( m \) on proposal \( l \), and \( n \) is the number of votes.

### 3.2 Signalling

The main alternative explanation of why party groups request RCV is signalling. In this perspective the emphasis lies on the rewards legislators can reap from position-taking instead of, or on top of, policy output and outcomes. While they cannot always be in the legislative majority, they can at least use the voting as a tool to signal their position to external constituencies and actors, on whom they may depend on for re-election (Mayhew 1974) or their future career. It may, therefore, be rationale for a party group to call a RCV to signal a strong and cohesive position on an issue even if it loses the vote.

\[4\text{more specifically, we do also compare final votes and amendment votes on the same proposal: } \frac{1}{n_{l,m}} \sum_{l,m} (CF_{il} - CA_{ilm}) \text{ (EP6)} > \frac{1}{n_{l,m}} \sum_{l,m} (CF_{il} - CA_{ilm}) \text{ (EP7) (see t-test in section 4.3)}\]
The first to promote this thesis in the case of the European Parliament was Thiem (2006), while Finke and Thiem (2010) provided some support for it later on. According to this perspective:

- MEPs do not change their voting behaviour if a vote is held by roll-call
- EPG only calls a roll-call, if it perceives its MEPs to vote cohesively

Therefore, there is no difference between the a priori cohesion of a group on a given item and the observed cohesion if there is a RCV on this item.

\[ \text{Observed Cohesion}_{ij} = \text{A priori Cohesion}_{ij} \], for all groups \(i\) and items \(j\)

However, on average, party group cohesion will be overestimated, due to the fact that party group will only request RCVs if at least their own cohesion is high. For each RCV, there must be at least one party group \(i\) which requested the vote and, therefore, must have had a highly cohesive position. For non-RCVs, cohesion of all party groups might be lower.

What does this mean for the comparison between final legislative votes in EP6 and EP7? In EP7, the RCVs on final legislative votes are mandatory, i.e. they are not called by any group. This means that the EP7 sample includes votes on which none of the groups was would have called a roll call, i.e. votes on which no group is very cohesive. In contrast, in the EP6 sample of RCVs at least one group should have been highly cohesive in each RCV, namely the one that called the roll call. Thus, based on the signalling theory, we expect the cohesion on final legislative votes to decrease on average in EP7 compared to EP6. In contrast, cohesion on amendment votes should not have been affected. Therefore, we again control for cohesion on amendment votes to account for a potential shift in group cohesion between the two parliamentary terms that is not related to the introduction of Rule 166 but to changes in the group composition, for instance.

**Hypothesis 2 (signalling):**

\[
\frac{1}{n_l} \sum_l (CF_{il} - \frac{1}{n_{l,m}} \sum_{l,m} CA_{ilm}) \text{ (EP6)} > \frac{1}{n_l} \sum_l (CF_{il} - \frac{1}{n_{l,m}} \sum_{l,m} CA_{ilm}) \text{ (EP7)} \]

where \(CF_{il}\) is the observed cohesion of group \(i\) on the final vote on proposal \(l\), \(CA_{ilm}\) is the observed cohesion of group \(i\) on the amendments \(m\) on proposal \(l\), and

\[ \frac{1}{n_{l,m}} \sum_{l,m} (CF_{il} - CA_{ilm}) \text{ (EP6)} > \frac{1}{n_{l,m}} \sum_{l,m} (CF_{il} - CA_{ilm}) \text{ (EP7)} \] (see t-test in section 4.3)
\[ n \text{ is the number of votes.} \]

Indeed, while via different mechanisms, the refined disciplining and the signalling models lead to identical hypotheses regarding the effect of Rule 166 on the observed cohesion in the 7th versus the 6th EP on final as compared to amendment RCVs.

### 3.3 Mixed motives

There can be a different explanation altogether behind RCV requests, though. Specifically, party groups may be requesting RCVs due to a mix of different motives, be it to discipline their MEPs, to signal their position, because they are interested in the voting behaviour of their own MEPs or the that of other party groups, or for an entirely different reason (Hug 2009). While the motives behind calling a roll-call might be mixed, the issues on which the RCVs are called have one common characteristic: for some reason, they are salient for the party group, or else the group would not bother to call a RCV. However, such important issues are inherently more contentious. Therefore, exactly in the votes where one or more party groups requested a RCV group cohesion might be lower than in non-RCVs (where the voting behaviour of individual MEPs is not of great interest to any party group, probably due to the fact that nearly all MEPs are in favour anyhow).

Like for the signalling theory, the underlying assumption is thus as follows:

\[
\text{Observed } \text{Cohesion}_{ij} = \text{A priori Cohesion}_{ij}, \text{ for all groups } i \text{ and items } j
\]

However, in contrast to the signalling theory, we now expect that RCVs take place if party groups are on average less cohesive.

For the difference between EP6 and EP7, we could, therefore, expect that once roll calls became mandatory on all final legislative votes and not only on the contentious ones on which party groups would have requested RCVs, group cohesion should increase on average.
Hypothesis 3 (mixed motives):

\[
\frac{1}{n_l} \sum_l \left( CF_{il} - \frac{1}{n_{l,m}} \sum_{l,m} CA_{ilm} \right) \text{(EP6)} < \frac{1}{n_l} \sum_l \left( CF_{il} - \frac{1}{n_{l,m}} \sum_{l,m} CA_{ilm} \right) \text{(EP7)} \]

where \( CF_{il} \) is the observed cohesion of group \( i \) on the final vote on proposal \( l \), \( CA_{ilm} \) is the observed cohesion of group \( i \) on the amendments \( m \) on proposal \( l \), and \( n \) is the number of votes.

Concerning the specification of the hypotheses, one note of caution is necessary: Party group cohesion will be measured as a fraction, which is bound between 0 and 1. This means that, when coming close to 0, or, as it is more likely in our case, 1, it might not be possible to observe the same increase in both cohesion on amendments and cohesion on final votes. For example, if a group’s average cohesion on amendments changes from 0.94 in EP6 to 0.99 in EP7, and the cohesion for final votes was already 0.97 in EP6, it is virtually impossible to observe the same (or even a higher) increase in cohesion on final votes than on amendments. In this case, our approach to use the difference between cohesion on final votes and on amendments might lead to acceptance of hypothesis 1.b and 2, rather than hypothesis 1.a or even hypothesis 3. Fortunately, as we will see later on, this is not so much of a problem for our descriptive analysis. Later on, in the regression model, we will account for the fact that our dependent variables are measured on the interval \([0, 1]\) by using fractional logistic regression (Papke and Wooldridge 1996).

4 Analysis

4.1 Data

To test our hypotheses we have combined the data on the RCV generously provided by Hix, Noury and Roland (2007) with additional data we collected from the EP’s Legislative Observatory and the official plenary minutes. The data covers the whole 6th EP and all the votes in the 7th EP until December 2010 inclusive. To increase the comparability of the samples in the two legislative terms, we select all the final and amendment votes that have taken place in the first 1.5 years of each parliamentary term. Furthermore, we only consider legislative votes as only...
they were affected by the EP rules’ change and, as discussed above, they differ significantly from non-legislative votes. Finally, we only examine the cohesion of the four main party groups that have existed during both legislative terms. These are the European People’s Party (PPE) (which included the Christian Democrats pre-2009 and was called PPE-DE), the Socialist Group (PSE) (now called S&D), the Liberal Group (ALDE) and the European Free Alliance Greens (Verts/ALE). Compared to other EP groups, the positions of four groups remained comparably consistent between EP6 and EP7. However, we will still need to account for changes in group composition due to the accession of Bulgaria and Romania in 2007 and changes after the 2009 elections when, for instance, the British conservatives left the EPP to form their own group. Furthermore, especially in EP6, some individual MEPs changed group affiliation within the legislative period. These changes could be traced using additional data on group membership (Høyland, Sircar and Hix 2009).

4.2 Measures of group cohesion

We use two alternative measures of party group cohesion — what we call the ‘Group-Line Index’ (Kreppel and Tsebelis 1999) and the Agreement Index (Hix, Noury and Roland 2007). The ‘Group-Line Index’ is probably the most straightforward measure of party group cohesion, as it simply measures the proportion of MEPs voting with the group line (i.e. with the majority of the group) out of the total number of group members that did not abstain.

\[
GLI_{ij} = \frac{\max(Yes_{ij}, No_{ij})}{Yes_{ij} + No_{ij}}, \text{ for each group } i \text{ on each item } j
\]

The ‘Group-Line Index’ thus ranges between 0.5 and 1, with 0.5 indicating that the group was equally divided between Yes and No votes and 1 indicating that there was complete cohesion among group members. However, the disadvantage of this measure is that it does not take into account abstentions but simply considers the larger percentage of group members that voted together either in favour or against a proposal. Thus, we will use the so-called Agreement Index, as defined by Hix, Noury and Roland (2007), as an additional measure throughout the paper, because this index incorporates abstentions, too.

\[
AI_{ij} = \frac{\max(Yes_{ij}, No_{ij}, Abst_{ij}) - \frac{1}{2}(Yes_{ij} + No_{ij} + Abst_{ij}) - \max(Yes_{ij}, No_{ij}, Abst_{ij})}{Yes_{ij} + No_{ij} + Abst_{ij}}
\]
The Agreement Index assumes values between 0 and 1, where 0 signifies complete discord in the group and 1 signifies that all group members voted the same way.

### 4.3 Descriptives

To test our hypotheses, first, we present some descriptive statistics and t-tests. Then, in the next subsection we analyse the group cohesion in a regression model, where we compare final and amendment votes in the 6th versus the 7th EP, controlling for a number factors.

Table 1 shows the average cohesion of the 4 biggest party groups that existed in both the examined parliamentary terms by type of vote (final or non-final, most of which are amendment, votes) and legislative term (EP6 or EP7) for the first 1.5 years of each term. In total, 699 legislative votes fit the criteria. The first thing to note is that cohesion on both amendment and final votes in all groups increased between the two legislative terms. Furthermore, the increase on final votes appear as clearly higher for PPE-DE and ALDE, and slightly higher for Verts/ALE, in absolute terms. Instead, the cohesion of PSE seems to have increased equally for final and amendment votes in absolute terms.

In Table 2 we demonstrate that the average Group-Line Index and Agreement Index of party groups on both amendments and final legislative votes increased between the 6th and the 7th EP. Furthermore, the increase in both measures seems higher on final than on amendment votes.\(^7\)

Evaluating whether the higher increase in cohesion on final than on amendment votes is statistically significant, however, requires a different setup of the data. The figures in Table 2 currently present the average group cohesion on all final and amendment legislative votes, ignoring whether they occurred on the same proposals or not. This may render the comparison flawed if, for instance, cohesion is higher on final votes whenever no RCVs were taken on amendments belonging to the same proposal, suggesting a more technical proposal or even one on which the Parliament simply made no amendments. To address this problem, in Table 3 we compare, instead, the average group cohesion on each amendment to the average

\(^7\)We acknowledge the problems associated with performing t-tests on non-normally distributed variables with different variances and will apply an alternative method for comparison of the cohesion means in the revised version of the paper. Nevertheless, our main t-test comparing the difference between group cohesion on final and amendment votes in EP6 and the same difference in EP7, which tests the hypotheses, suffers less from these problems as the difference variables are relatively normally distributed.
party group cohesion on the corresponding final vote of that proposal. Thus, we can compare the difference in group cohesion on final and amendment votes in EP6 and EP7 to test our hypotheses while controlling for the particularities of given legislative proposals.

The results of this comparison are shown in Table 3. First, the table shows once again that group cohesion has increased on both amendment and final votes between EP6 and EP7 even if we only compare votes that took place on the same proposals (and these increases are significant at the 5% level; t-tests not shown in table). Second, when considering only amendment and final votes took place on the same proposals, in fact cohesion on final votes appears to have been significantly lower than on the corresponding amendment votes in EP6, contrary to the conventional wisdom. The opposite holds true in EP7. Finally, the gap between group cohesion on final and amendment votes has significantly widened in EP7 as compared to EP6 (displayed in the last row of the table). In other words, in EP7 the average group cohesion on final votes is not only higher than the average group cohesion on amendment votes but the former has also increased significantly more than the latter. That means that the EP’s rule change has, indeed, increased the average cohesion on final legislative votes, and more so that we would expect due
Table 2: Average cohesion on amendment and final legislative votes in the first 1.5 years of the 6th and the 7th EP of the four biggest party groups

<table>
<thead>
<tr>
<th>Vote</th>
<th>EP</th>
<th>Group-Line index</th>
<th>Agreement index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Am.</td>
<td>6</td>
<td>0.928</td>
<td>0.871</td>
</tr>
<tr>
<td>Am.</td>
<td>7</td>
<td>0.942</td>
<td>0.901</td>
</tr>
<tr>
<td>Am. (EP7-EP6)</td>
<td>0.014*</td>
<td>0.030*</td>
<td></td>
</tr>
<tr>
<td>Final</td>
<td>6</td>
<td>0.963</td>
<td>0.915</td>
</tr>
<tr>
<td>Final</td>
<td>7</td>
<td>0.991</td>
<td>0.976</td>
</tr>
<tr>
<td>Final (EP7-EP6)</td>
<td>0.028*</td>
<td>0.061*</td>
<td></td>
</tr>
</tbody>
</table>

Note: T-test, * significance at p<0.05, one-tailed.

Table 3: Average cohesion on amendment and their corresponding final legislative votes in the first 1.5 years of the 6th and the 7th EP of the four biggest party groups

<table>
<thead>
<tr>
<th>Vote</th>
<th>EP</th>
<th>Group-Line index</th>
<th>Agreement index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Am.</td>
<td>6</td>
<td>0.918</td>
<td>0.853</td>
</tr>
<tr>
<td>Final</td>
<td>6</td>
<td>0.892</td>
<td>0.773</td>
</tr>
<tr>
<td>Final-Am.</td>
<td>6</td>
<td>-0.026*</td>
<td>-0.080*</td>
</tr>
<tr>
<td>Am.</td>
<td>7</td>
<td>0.947</td>
<td>0.914</td>
</tr>
<tr>
<td>Final</td>
<td>7</td>
<td>0.987</td>
<td>0.950</td>
</tr>
<tr>
<td>Final-Am.</td>
<td>7</td>
<td>0.040*</td>
<td>0.036*</td>
</tr>
<tr>
<td>Final-Am.</td>
<td>EP7-EP6</td>
<td>0.066*</td>
<td>0.116*</td>
</tr>
</tbody>
</table>

Note: T-test, * significance at p<0.05, one-tailed.

to the general shift in group cohesion between EP6 and EP7, as manifested by the lower increase in group cohesion on amendments between the two legislative terms.

These tests show evidence in support of Hypothesis 3 on mixed motives and against disciplining and signalling hypotheses. Indeed, the new rule of mandatory RCV on all final legislative votes has increased cohesion on these votes, and this is not due to the general increase in cohesion in EP7. In the next section, we turn to examining whether this is still true if we control for a number of exogenous factors, such as group composition shifts, in a regression analysis.
4.4 Regression analysis

We now turn to the analysis of the effect of the rule change concerning mandatory RCVs on final legislative votes in EP7 on the observed party group cohesion using a fractional logistic regression model.

The fractional logistic regression was designed to account for the fact that a dependent variable can only assume values in the interval [0, 1] — see Papke and Wooldridge (1996) for a detailed description and specification of the functional form. The fractional logistic regression is thus better suited for our purpose than a simple OLS regression, which assumes a normal distribution of the dependent variable and does not account for the fact that the observations are bound between 0 and 1. Also, the fractional logistic regression is more appropriate than a beta-regression, which would assume the dependent variable to follow a beta-distribution, meaning that it could only take values in the interval (0, 1), i.e. excluding the values 0 and 1. As both the Group-Line Index and the Agreement index often assume the value 1, the beta-regression is thus not well suited to handle our data.

In line with our hypotheses, we aim at testing whether there is a difference in group cohesion in final legislative votes between EP6 (when RCVs were called by EPGs) and EP7 (when RCVs on final legislative votes became mandatory) while controlling for a potential difference in group cohesion on amendments. Thus, we are mainly interested in the effect of the interaction between the variable EP7 (indicating whether the vote took place in EP7 or not, in which case it took place in EP6) and the variable Final vote. An insignificant coefficient of the interaction term would lend support to Hypothesis 1.a, a significantly negative coefficient would support Hypotheses 1.b and 2, while a significantly positive coefficient would support Hypothesis 3.

Additionally, we control for several variables which might also affect cohesion:

The variable ‘RCV requester’ takes the value 1 if the party group requested the RCV. In line with hypotheses 1.b and 2, one could expect that the party group which called the RCV would be more cohesive, either due to the additional disciplining effect or according to the signalling theory because it only called a RCV to signal its cohesive position on an issue. ‘RCV requests on proposal’ measures the number of RCV requests of the group on amendments to the proposal. This can be understood as an indicator of the salience the group attaches to the proposal. A further indicator of salience could be ‘Participation’, which gives the total number of MEPs that took part in the vote. ‘EPG had rapporteur’ shows whether the rapporteur belonged to the party group.
The fact that group composition changed within parliamentary terms and between parliamentary terms is on the one hand accounted for by including the variable 'EPG fractionalization index' \(^8\). The fractionalization index takes the value 0 if the party group consists only of one national party, while it comes closer to the value 1 if the group consists of many small national parties. Thus, higher values indicate that the group is more fractionalized. On the other hand, we controlled for the group size ('EPG size'). We also estimated models including dummy variables for the different groups (with ALDE serving as the reference category in our regression model).

Furthermore, we included variables for different periods of the legislative period, as group cohesion might change during the electoral cycle (cf. Lindstädt, Slapin and Vander Wielen 2011). Finally we accounted for differences between legislative procedure of the proposals and their issue areas (responsible standing committees).

Table 4 and Table 5 display the results of the regression analysis for different model specifications with the Group-Line Index or the Agreement Index as the dependent variable. The results prove to be robust across model specifications and across the two measures of the dependent variable.

The main finding is that the interaction between ‘EP7’ and ‘Final vote’ is significantly positive, showing that the increase in the level of group cohesion between EP6 and EP7 was significantly higher for final votes than for amendments. This supports Hypothesis 3 and contradicts Hypotheses 1.a, 1.b and 2. Moreover, the variable ‘RCV requester’ has a negative effect in some of the model specifications, which also speaks against Hypotheses 1.b and 2. The negative effects of the number of RCV requests on a proposal as well as the participation in the vote also lend support to hypothesis 3, if we take these variables as indicators of the proposal’s salience. In other words, party group cohesion is lower on votes that are perceived as salient by a party group or by MEPs overall. Whether the group had the rapporteur or not is only significantly positive for the Group-Line Index. An important variable, however, is the fractionalization index. The more fractionalized a group is, the less cohesive do its MEPs vote. Furthermore, Models 4 and 5, including party group dummies for party group, show that the PSE and the Greens are significantly more cohesive than the liberal ALDE.

To sum up, our results disconfirm both the disciplining, as well as the signalling

\[^8\] Fractionalisation\((EPG_i) = 1 - \sum_k \frac{\text{size}(NP_k)}{\text{size}(EPG_i)} \) for national parties \(k\) of group \(i\) (see also Hix, Noury and Roland 2007, p. 97)
Table 4: Fractional logistic regression of party group cohesion in the 6th and the 7th EP

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.233**</td>
<td>0.398**</td>
<td>0.496**</td>
<td>0.583**</td>
<td>0.524**</td>
</tr>
<tr>
<td></td>
<td>(0.081)</td>
<td>(0.090)</td>
<td>(0.091)</td>
<td>(0.093)</td>
<td>(0.106)</td>
</tr>
<tr>
<td>EP7</td>
<td>0.718**</td>
<td>0.714**</td>
<td>0.475**</td>
<td>0.489**</td>
<td>0.525**</td>
</tr>
<tr>
<td></td>
<td>(0.153)</td>
<td>(0.154)</td>
<td>(0.160)</td>
<td>(0.176)</td>
<td>(0.183)</td>
</tr>
<tr>
<td>Final vote</td>
<td>1.225**</td>
<td>1.298**</td>
<td>1.276**</td>
<td>1.174**</td>
<td>1.100**</td>
</tr>
<tr>
<td></td>
<td>(0.251)</td>
<td>(0.255)</td>
<td>(0.256)</td>
<td>(0.253)</td>
<td>(0.252)</td>
</tr>
<tr>
<td>RCV requester</td>
<td>0.072</td>
<td>-0.170</td>
<td>-0.225*</td>
<td>-0.191</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.101)</td>
<td>(0.097)</td>
<td>(0.105)</td>
<td>(0.105)</td>
<td></td>
</tr>
<tr>
<td>RCV requests on proposal</td>
<td></td>
<td>-0.046**</td>
<td>-0.054**</td>
<td>-0.058**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.009)</td>
<td>(0.009)</td>
<td>(0.010)</td>
<td></td>
</tr>
<tr>
<td>Participation</td>
<td></td>
<td>-0.007**</td>
<td>-0.008**</td>
<td>-0.008**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td></td>
</tr>
<tr>
<td>EPG had rapporteur</td>
<td>0.207*</td>
<td>0.191*</td>
<td>0.178*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.086)</td>
<td>(0.085)</td>
<td>(0.082)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPG fractionalization index</td>
<td></td>
<td>-15.066**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.787)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPG size</td>
<td>-0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPE(-DE)</td>
<td></td>
<td>0.024</td>
<td>0.029</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.003)</td>
<td>(0.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSE (S&amp;D)</td>
<td></td>
<td>0.202*</td>
<td>0.204*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.091)</td>
<td>(0.091)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verts/ALE</td>
<td></td>
<td>1.155**</td>
<td>1.144**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.144)</td>
<td>(0.142)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st half year</td>
<td></td>
<td>0.085</td>
<td>0.291</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.183)</td>
<td>(0.197)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd half year</td>
<td></td>
<td>-0.332**</td>
<td>-0.240**</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>(0.074)</td>
<td>(0.089)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedure dummies</td>
<td>YES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Committee dummies</td>
<td>YES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.551**</td>
<td>2.538**</td>
<td>21.167**</td>
<td>7.841**</td>
<td>7.389**</td>
</tr>
<tr>
<td></td>
<td>(0.041)</td>
<td>(0.043)</td>
<td>(0.686)</td>
<td>(0.750)</td>
<td>(0.790)</td>
</tr>
<tr>
<td>Observations</td>
<td>2,796</td>
<td>2,624</td>
<td>2,624</td>
<td>2,624</td>
<td>2,624</td>
</tr>
<tr>
<td>Log-likelihood</td>
<td>-448.9</td>
<td>-406.1</td>
<td>-391.6</td>
<td>-389.6</td>
<td>-385.6</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses

** p<0.01, * p<0.05

22
Table 5: Fractional logistic regression of group agreement in the 6th and the 7th EP

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP7</td>
<td>0.297**</td>
<td>0.475**</td>
<td>0.564**</td>
<td>0.625**</td>
<td>0.562**</td>
</tr>
<tr>
<td></td>
<td>(0.078)</td>
<td>(0.086)</td>
<td>(0.087)</td>
<td>(0.090)</td>
<td>(0.100)</td>
</tr>
<tr>
<td>Final vote</td>
<td>0.468**</td>
<td>0.468**</td>
<td>0.209</td>
<td>0.209</td>
<td>0.286*</td>
</tr>
<tr>
<td></td>
<td>(0.126)</td>
<td>(0.126)</td>
<td>(0.134)</td>
<td>(0.147)</td>
<td>(0.142)</td>
</tr>
<tr>
<td>EP7_Final vote</td>
<td>1.036**</td>
<td>1.035**</td>
<td>1.045**</td>
<td>0.957**</td>
<td>0.836**</td>
</tr>
<tr>
<td></td>
<td>(0.190)</td>
<td>(0.198)</td>
<td>(0.189)</td>
<td>(0.188)</td>
<td>(0.188)</td>
</tr>
<tr>
<td>RCV requester</td>
<td>-0.030</td>
<td>-0.199*</td>
<td>-0.210*</td>
<td>-0.186*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.086)</td>
<td>(0.087)</td>
<td>(0.093)</td>
<td>(0.092)</td>
<td></td>
</tr>
<tr>
<td>RCV requests on proposal</td>
<td>-0.052**</td>
<td>-0.057**</td>
<td>-0.061**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.008)</td>
<td>(0.009)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation</td>
<td>-0.007**</td>
<td>-0.007**</td>
<td>-0.007**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPG had rapporteur</td>
<td>0.136</td>
<td>0.130</td>
<td>0.122</td>
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<tr>
<td></td>
<td>(0.082)</td>
<td>(0.082)</td>
<td>(0.079)</td>
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<tr>
<td>EPG fractionalization index</td>
<td>-10.157**</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>(1.483)</td>
<td></td>
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<tr>
<td>EPG size</td>
<td>0.000</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPE(-DE)</td>
<td></td>
<td>0.045</td>
<td>0.048</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.090)</td>
<td>(0.088)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSE(S&amp;D)</td>
<td></td>
<td>0.262**</td>
<td>0.264**</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>(0.089)</td>
<td>(0.089)</td>
<td></td>
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</tr>
<tr>
<td>Verts/ALE</td>
<td></td>
<td>0.677**</td>
<td>0.666**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.105)</td>
<td>(0.103)</td>
<td></td>
<td></td>
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<tr>
<td>1st half year</td>
<td></td>
<td>0.111</td>
<td>0.313</td>
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<tr>
<td></td>
<td></td>
<td>(0.154)</td>
<td>(0.173)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd half year</td>
<td></td>
<td>-0.309**</td>
<td>-0.212**</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>(0.071)</td>
<td>(0.082)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedure dummies</td>
<td>YES</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Committee dummies</td>
<td>YES</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Constant</td>
<td>1.912**</td>
<td>1.920**</td>
<td>15.520**</td>
<td>6.518**</td>
<td>5.641**</td>
</tr>
<tr>
<td></td>
<td>(0.037)</td>
<td>(0.040)</td>
<td>(0.662)</td>
<td>(0.702)</td>
<td>(0.738)</td>
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<tr>
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<td>Log-likelihood</td>
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<td>-619.4</td>
<td>-603.6</td>
<td>-601.3</td>
<td>-594.1</td>
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Robust standard errors in parentheses
** p<0.01,  * p<0.05

23
theory on RCV request. According to these theories, cohesion on final legislative votes should have either stayed the same or decreased after the change in the EP’s rules of procedure (even after controlling for cohesion on non-final (amendment) votes. As this is not the case and cohesion on final votes has significantly increased due to the fact that roll-calls on these votes are now mandatory, we find support for a third theoretical explanation on RCV request, namely that party groups call RCVs on more salient, and thus more contentious issues. This, however, leads to the conclusion that - contrary to previous assumptions in the literature (Carrubba et al. 2006) - party group cohesion in might not have been overestimated by roll-call vote analysis, but rather underestimated.

4.5 Discussion

MATERIAL WE CAN USE HERE:

If both the disciplining and the signalling hypotheses are disconfirmed, then it means that either:
- Disciplining improved every EPG’s cohesion ??
- Disciplining did not work for any EPG (had not effect) ??
- Signalling: EPGs were not calling selectively RCVs on votes on which their a priori cohesion was higher

So, cohesion either stayed the same or increased, it’s because now RCVs are called also on non-contentious if a ‘culture of consensus’ due to the frequency of RCVs emerged.

RCVS UNDER ESTIMATE COHESION: Can calling a RCV decrease any EPG’s cohesion? - not the one calling the RCV, else its behaviour is irrational (unless it has incomplete information on the outcome of a RCV) - it can decrease the cohesion of non-RCV calling EPGs NEW mixed theory? – an EPG is likely to call a RCV if it is already quite cohesive but this RCV is likely to decrease the cohesion of other EPGs (weakening the opposition or exposing their lack of cohesion)

If we nevertheless manage to find that cohesion decreased, there can be an alternative explanation: as MEPs’ behaviour is more visible to external constituents, they may e.g. vote more often with their national party preferences rather than EPGs. Indeed, Hix et al (2007, p. 100) find that the more RCVs are held in a 6 month period between 1989 and 2004, the less cohesive party groups are in that period.
5 Conclusion

To understand legislative behaviour and party politics in the European Parliament, scholars have heavily relied on roll call vote data. The potential bias in this data and its consequences for the observed party group cohesion in the EP have received most attention in the recent literature. While the theoretical expectations and findings in their support in different studies diverge, the main proposed models – disciplining and signalling – both postulate that the observed party group cohesion in RCVs is overestimated. In contrast, in this paper we find evidence that party group cohesion in RCVs may in fact be underestimated.

Specifically, we took advantage of the unique opportunity to examine the potential bias in the RCVs that a change in the parliamentary rules provides. With the introduction of mandatory roll-call voting on all final legislative votes in 2009, we expected to find decreasing party group cohesion on average as party group no longer have the opportunity 1) to discipline their members by requesting the roll-call on such votes and 2) to choose requesting RCVs on the votes on which they have are cohesive to signal their position. Instead, we find an increased group cohesion on average. This result is robust after we control for a number of factors such as the party group, the policy area, which group requested the RCV, etc.

We explain this finding with the increase in RCV on less salient votes. Before the 2009 rule change all RCVs had to be requested, suggesting that they were important at least to the requesting party groups. After the rule change, all final legislative votes are taken by roll call irrespective of whether they were considered as being important by any group. As party groups are likely to exhibit higher cohesion on such less important votes, as they usually concern less contentious issues, it is perhaps not so surprising to find increasing party group cohesion. If all votes were taken by RCV, then, we are likely to observe higher cohesion than we currently do by mostly observing requested RCV, which we argue are more salient for at least one party group (namely the one requesting the RCV), and therefore likely to be more contentious.

This finding has important implications for our understanding of party politics in the European Parliament and highlights worthwhile topics for future research. First, we probably have to rethink whether party groups in the EP are in fact able to discipline their members (cf. Thiem 2007). Second, the ‘mixed motives’ behind RCV requests need further exploration. As neither the disciplining nor the signally theory seem to hold, a comprehensive explanation for RCV request is still missing.
However, the results of our analysis do not only have implications for the EP, but can potentially inform studies of other legislatures as well. The problem of a potential selection bias in roll-call votes concerns legislative scholars around the world (for a list of legislatures where a sample of votes are taken by roll-call, see Hug 2009). We thus hope to have been able to contribute to the understanding, or at least the discussion, of RCV selection bias.

References


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URL: [http://eup.sagepub.com/cgi/doi/10.1177/1465116508099764](http://eup.sagepub.com/cgi/doi/10.1177/1465116508099764)


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