

# **Selection Bias in the Use of Roll Call Votes to Study Legislative Behavior**

Clifford J. Carrubba, Emory University

Ryan Clough, Emory University

Elizabeth Montgomery, Emory University

Lacey Murrah, Emory University

Rebecca Schambach, Emory University

Matthew Gabel, University of Kentucky

**EPRG Working Paper, No. 11**

## ABSTRACT

Scholars often rely upon roll call votes to study legislative behavior in democratic systems. However, many legislatures only decide a minority of decisions by roll call. Thus, if these roll call votes are not a random sample of the universe of votes cast, scholars may be deriving biased results in their studies. In fact, theories over why roll call votes are requested would predict bias in exactly the issues scholars have most heavily studied, intra-party cohesion and inter-party conflict. This paper for the first time empirically demonstrates the character and severity of this selection bias problem by examining a year's worth of European Parliament voting data. While one should always be careful about generalizing from one legislative setting to the next, the severity of the problem in the European Parliament data suggests a high degree of caution is appropriate in using roll call votes as a sample of legislative behavior.

The study of legislative behavior in democracies relies fundamentally on the analysis of recorded, or roll call, votes (Collie 1985). Probably the most developed area of such study is the U.S. Congress. Congressional scholars have used roll call vote (RCV) analysis to explore how parties organize and influence legislative behavior (e.g., Snyder and Groseclose 2000), test theories of internal legislative organization (e.g., Krehbiel 1991), and characterize the dimensionality and substantive issues that comprise the US legislative policy space (e.g., Poole and Rosenthal 1991, 1997), to cite just a few prominent examples. Similar RCV analyses have been applied to legislative behavior in other countries, particularly for evaluating intra-party cohesion and inter-party conflict (e.g., Haspel, Remington, and Smith 1998; Desposato 2000; Carey forthcoming-b; Carey 2002).

While the appeal of this approach is obvious, scholars have also recognized several problems with using it. For example, Desposato (2002) identified and developed a solution for inferential problems in estimating the level of cohesion in small parties. Jackman (2001) and Londregan (1999) identified and solved problems related to inferring legislators' ideal points and dimensionality of legislative policy conflict from RCV data. And, even more fundamentally, Carey (2002) and Cox and McCubbins (1993), among others, identified problems with indiscriminately pooling roll call votes.<sup>1</sup>

We believe there is another fundamental, but under-studied, problem with the use of roll call votes. Many legislatures, including the Swiss National Council, Brazilian Chamber of Deputies, and Argentine Chamber and Deputies, decide only a fraction of legislation by RCVs.<sup>2</sup> As a result, the value of these votes for drawing inferences about legislative behavior depends on the sampling properties of roll calls. For example, the European Parliament has historically only used roll calls about a third of the time (Corbett, Jacobs, and Shackleton 2000: 160). If this third is a random sample of the universe of legislative votes, our inferences about legislative behavior should be unbiased. However, if this third is not a random sample, we cannot be sure of drawing accurate conclusions about legislative behavior from roll calls without explicitly accounting for the selection process.

---

<sup>1</sup> For instance, in their studies of party unity, Carey (2002) applied varying weights to roll call votes according to how closely they were contested and Cox and McCubbins (1993) focused only on votes in the US House of Representatives where the leaderships of the two parties take opposing views.

<sup>2</sup> The size of this fraction varies across legislatures, due at least in part to differences in the rules for selecting votes for roll call. For example, the legislatures of some nations—such as Costa Rica—require a majority of legislators present to support a request for roll call. Other legislatures, such as the European Parliament, only require a minority of legislators to support a roll call request. Carey (forthcoming-a) describes cross-national and over time variation in the use of recorded votes in several Latin American legislatures.

In fact, these data are likely to be biased in ways that directly relate to the issues scholars have been exploring – party unity<sup>3</sup> and the underlying dimensions of policy conflict. Simply put, 1) we know party leaders are often the individuals who decide what votes should be roll calls and 2) for a variety of reasons we believe party leaders care about the legislative behavior of their members (e.g., party cohesiveness) on roll calls. As a result, there is a real possibility that the selection of votes for roll call is endogenous to the characteristics of legislative behavior we are interested in studying. Yet, despite widespread recognition that selection bias could be confounding existing findings, we are unaware of any studies that control for this bias.<sup>4</sup>

Before trying to control for this potential selection bias, however, we first need to determine if such a bias actually exists and how badly it may be confounding existing findings. An exhaustive analysis of all legislative chambers is obviously beyond the scope of a single study. Thus, in this paper, we focus on a single legislative chamber in which RCVs are only a small sub-sample of all votes cast, the European Parliament (EP). This chamber is a useful starting point for at least three reasons. First, the EP has a significant role in deciding many areas of EU legislation. Not only has the EP become a co-equal legislative body within the EU legislative process, but the range of policy competencies over which the EP has jurisdiction has increased with recent reforms as well. Second, and at least partly in response to its increasing importance in Europe, sophisticated studies using roll call votes are being employed to understand legislative behavior in this chamber. Scholars have analyzed RCVs to infer the level of cohesion in transnational party groups, the degree to which national and transnational parties are exerting party discipline, the character of policy conflict, and the ideal points of members of the European Parliament (MEPs) in the policy space, among other characteristics (e.g., Hix 2001a, 2001b, 2002; Kreppel 2000, 2002; Raunio 1996, 1997, 1999). And finally, the EP is a chamber where legislative parties are only now developing the internal organization and centralized authority common to many parties in European national legislatures (Kreppel 2002, chapter 8). Thus, if we identify substantial selection bias in this chamber, it is likely that roll call vote samples in systems with stronger parties will be better able to exploit roll call requests and therefore be only more likely to have selection bias problems due to strategic behavior by legislative parties.

---

<sup>3</sup> We use the term “unity” here as in Carey (2002) to mean “the proclivity of copartisan legislators to vote together.”

<sup>4</sup> However, Carey (2002; forthcoming-a) notes the potential problems of ignoring issues of selection bias.

The rest of the paper proceeds in four parts. In the first section of the paper, we review previous research on voting behavior in the EP. We then, in the second section, discuss both theoretical and empirical reasons for concern regarding the inferences drawn from EP RCV data. Note that we will actually highlight two potential problems with EP RCV analysis in this section. One is obviously the issue of selection bias. However, we also want to draw attention to the fact that to varying degrees scholars have pooled RCVs in ways that likely bias their findings as well. The third section describes our data collection and presents the results of several relevant comparisons of RCVs with the universe of all votes in the 1999-2000 EP legislative term. Finally, we discuss the implications of these findings for our understanding both of legislative behavior in the EP and the character of representation in the EU political system, as well as what these results imply for the use of RCVs in studying legislative behavior in other political systems.

## **1. Voting Behavior, Party Group Cohesion, and Party Group Competition**

A long research tradition in comparative legislative behavior has focused on evaluating the importance of parties to legislative politics based on two measures of party behavior: the level of intra-party cohesion/unity and the character of inter-party conflict (Collie 1985: 475). Specifically, scholars used summary statistics of the similarity of voting patterns among members of parties to evaluate party cohesion and the dissimilarity of voting patterns across parties to define the character of inter-party policy conflict. EU scholars have applied this analytic approach to the study of transnational coalitions of national party delegations in the EP, known as party groups (PGs).

In many regards, these party groups appear much like national parties. They are generally organized according to traditional party families – e.g. Members of the European Parliament (MEPs) from national socialist parties comprise the Party of European Socialists, they are considered important to the internal organization of the legislative chamber – e.g. speaking time, committee assignments, and other valuable roles and resources in the EP are distributed via PGs, and they often instruct their membership on how to vote on particular issues. However, because 1) party groups are comprised of independently elected national delegations and 2) cross-national conflict over EU policy is not uncommon, it is unclear how important party groups really are to the legislative behavior of their MEPs.

Studies of MEP voting behavior have generally supported two conclusions regarding PG cohesion and competitiveness. First, PG cohesion is higher than cohesion by nationality, is objectively high for the major party groups, and has generally increased over time. Studies of RCVs in the EP in the 1980s and early 1990s showed high PG cohesion (Attina 1990; Brzinski 1995; Raunio 1997). Raunio (1997: 34) showed that, in three-quarters of RCVs for the major PGs, 90% of MEPs voted with the PG line. Kreppel and Tsebelis (1999) used correspondence analysis of 100 RCVs from 1989-1994 to confirm that PGs are a stronger influence on voting coalitions than nationality. Kreppel (2001) analyzed 300 RCVs from 1980-1996, also using correspondence analysis and demonstrated high PG cohesion over this period.

Recent studies confirm these findings. Hix (2001; 2002), analyzing RCV data from July 1999-July 2000, showed that PG was a stronger determinant of voting behavior than nationality or individual MEP ideology. Similarly, Noury (2002) and Thomassen, Noury, and Voeten (2002) showed that PGs were the strongest determinant of vote choice from 1989-1999 and that PG cohesion has increased over time. Finally, Hix, Noury, and Roland (2002) have analyzed all RCVs since the advent of direct election to the EP. This comprehensive study showed that PG cohesion has remained high since 1979 and has increased with the legislative power of the EP.

The second general conclusion is that legislative politics in the EP is competitive, with PGs generally distinguishing themselves along one main ideological dimension that reflects traditional left-right political conflict found at the domestic level in the EU member-states. This conclusion is based on several analyses of vote patterns among MEPs across a variety of issue areas. The basic methodology of these analyses is to evaluate how PG affiliation relates to these vote patterns. If MEPs of the same PG commonly vote together and they vote differently from MEPs of other PGs on some issues, then this indicates competitiveness. And, if the policy areas that account for whether and which PGs differ in voting behavior are those that commonly define the left-right dimension, then the character of this competition is left-right.

A broad set of studies, based on RCVs, shows that indeed PG ideological distinctions affect MEP voting behavior and PG coalition behavior. Raunio (1997) showed that coalitions of PGs on RCVs are explained by their proximity on the left-right dimension. Kreppel and Tsebelis (1999) and Kreppel (2000; 2001) add important context to this conclusion, showing that the level of left-right ideological competition has changed over time. In particular, the frequency of “grand coalitions” between the two largest PGs has increased over time. But

left-right ideology remains an accurate characterization of policy differences and competition in the EP. Based on a larger number of RCVs, Noury (2002) and Thomassen, Noury, and Voeten (2002) identify four dimensions to competition in the EP, but show that the dominant dimension is left-right. Hix (2001), analyzing RCVs from 1999, and Hix, Noury, and Roland (2002), using the full set of RCVs from 1979-2001, show that inter-PG competition in the EP has been along a single left-right ideological dimension. This pattern has been stable over time.

It is important to note that the use of RCVs to describe the EP policy space also facilitates the examination of other issues of EP legislative behavior. For example, based on a dimensional analysis of RCVs, Hix (2002a) estimated individual MEP policy positions. He then evaluated how national partisanship relates to MEP deviation from PG voting tendencies. Noury (2002) estimated MEP ideal points in a multi-dimensional policy space to evaluate, among other things, the stability of the EP policy space over time.

This characterization of the EP, if accurate, obviously has important implications for our understanding of legislative politics in the EU. However, equally importantly, it also speaks to the prospects for a well-functioning parliamentary democracy at the EU level. With the growth in the scope of EU competency at the expense of national legislative authorities, a variety of academics, journalists, and politicians have expressed concerns about the quality of democratic control over EU policy-making (Weale and Nentwich 1998; Blondel, Sinnott, and Svensson 1998; Schmitt and Thomassen 2000). Many scholars consider the PGs as essential to improving the quality of democracy in the EU. In different forms, these scholars appeal to a “responsible party model” when evaluating the quality of democratic control in the EU (e.g., Thomassen, Noury, and Voeten 2002; Schmitt and Thomassen 1999).<sup>5</sup> According to this model, parties serve as the crucial connection between voters’ interests and policy-making. To do this, they must provide different policy programs to voters, voters need to vote based on their preferences over policy programs, and parties must behave cohesively in executing their programs when given control over policy-making.

These RCV results suggest that PGs meet the requirements of the responsible party model, at least in terms of legislative behavior. MEPs vote according to their PG affiliations – resulting in high internal PG cohesion – and PGs differentiate themselves from each other according to their ideological positions on the Left-Right dimension. Consequently, Hix,

---

<sup>5</sup> Note that our purpose here is not to advocate or critique this normative model. We describe the model because it is the motivation for much of the empirical analysis we discuss below.

Noury, and Roland (2002) conclude that the EP functions as a “normal” parliament, resembling the legislatures of the EU member-states in terms of party cohesion and the character of competition. Thus, if European elections were reformed to allow PGs, rather than national parties, to organize and contest the elections, we could imagine a dramatic improvement in the connection between voter preferences and policy-making in the EU. However, as we argue in the next section, the reliability of these findings hinges critically on the quality of RCV data.

## **2. Reconsidering RCVs**

As stated in the introduction, we believe there are two potentially serious problems with RCV studies: 1) to various degrees studies pool votes that should not be treated as identical observations; and 2) all studies assume that RCVs are representative samples of the universe of votes cast. The first issue is potentially problematic because the EP has numerous procedures by which it makes decisions and, because the consequences of a vote under different procedures can be very different, the incentives for how to behave over a vote can be very different. The second issue is potentially problematic because there are strategic incentives to request RCVs. To further demonstrate why, we consider each of these issues in turn.

### **Pooling Concerns**

First, consider the pooling issue. The EP makes decisions using several different procedures including resolutions, consultation votes, assent votes, and co-decision votes.<sup>6</sup> Further, in some of these procedures there are also multiple rounds of votes. The consequences of casting votes under these various procedures and in these different rounds all differ significantly.

Resolutions and Consultation votes are primarily symbolic. Resolutions are EP motions not directly associated with any piece of legislation. They tend to be general statements of position on some issue of the day, or declarations stating that the EP would like to see legislation of some particular form on a particular issue. Thus, these votes are comparatively symbolic because they do not directly influence EU legislation. Consultation

---

<sup>6</sup> We do not discuss cooperation votes here because there were no observations of cooperation votes for the year’s worth of data we collected.



procedure votes are perhaps even more symbolic. While the EP can temporarily slow down the legislative process by delaying its vote, all decisions under this procedure are wholly non-binding opinions.

Votes cast under the assent and Co-decision procedures can have a much more direct and substantial impact on legislative outcomes. Under the Assent procedure, the EP can veto the motion under consideration.<sup>7</sup> Under the Codecision procedure, the effect of an EP vote depends on whether it is a round I, II, or III vote. Codecision I is similar to the Consultation procedure in that the EP issues an opinion. However, if the EP and Council do not reach an agreement, a second round of deliberation occurs. The EP has the ability to amend and reject the Council's common position in Codecision II. If agreement is still not reached in Codecision II, then Codecision III begins with the bill being referred to a Conciliation Committee, which is comprised of members of the Council and EP. If a compromise is reached in the form of a joint text, it is referred back to the EP and Council for a final vote. If an agreement cannot be reached, the bill falls.

The importance of the EP's vote for EU legislative decisions, thus, differs dramatically by the type of vote being cast. Resolutions and consultation votes are the most symbolic since neither vote directly influences policy decisions. Codecision I votes are still not binding votes, but they can have strategic importance since the Council will have to take the EP's position into consideration in later rounds. And Codecision II, Codecision III and Assent votes all have direct influence on what form the policy takes and/or whether the motion passes at all.

These differences are potentially significant for inferences drawn over EP legislative behavior. For example, if we want to evaluate party group discipline in the EP – as Hix does in his 2001 article, we want to consider leadership's ability to influence outcomes on votes that matter. If we presume votes that influence legislative outcomes tend to be more important than votes that do not, we would then want to examine a dataset consisting primarily, if not solely, of binding votes – Codecision II, Codecision III, and Assent votes. The more non-binding votes included, the less we are able to assess party leadership's influence. This concern clearly arises with regards to the study of intra-party cohesion or cross-party conflict as well. Thus, either the types of votes used in this analysis should be selected based upon the question under consideration, or, when possible, hypotheses should be specified in a way that takes account of the differences in procedures and votes.

---

<sup>7</sup> The Assent procedure primarily deals with the ascension of new member states and some international agreements

Note that, because different studies have pooled RCVs in different ways, one cannot make blanket statements about how severely pooling has affected previous findings. For example, Hix (2001) pooled all RCVs in his analysis, Raunio (1999) and Brzinski (1995) used random samples of all votes in their analyses, Attina pooled legislative votes (1990), Kreppel and Tsebelis (1999) pooled over two rounds of cooperation votes, and Kreppel (2002) pooled cooperation and Codecision votes, but analyzed resolutions separately. Clearly, the more disparate types of votes pooled, the more substantial the concern. However, as we demonstrate subsequently, at least for the 1999-2000 session there are so few Codecision II, Codecision III and Assent RCVs, that almost any pooling is unavoidably going to marginalize the most important votes.

### **Selection concerns**

Next consider the incentive to request RCVs. Previous research offers several arguments for the strategic use of RCVs by PGs. See Kreppel (2002: 128-9) for an extremely thorough discussion of these possible strategic motivations. Here we just highlight two of the most common arguments.

The first argument assumes that PGs use RCVs to influence legislative outcomes. As Kreppel (2001:128) states, PG leaders can use RCVs to enforce party discipline. PG leaders have the ability to reward or punish their membership through a variety of means – e.g. the granting of committee seats and other perks. However, PG leaders cannot reward and punish in an effort to ensure party discipline without some way of monitoring their membership. Thus, PG leaders have an incentive to strategically request RCVs on bills they consider important, for which the outcome of the vote is uncertain, and where they anticipate inducing party cohesion.<sup>8</sup>

The second argument claims that PGs use RCVs to signal policy positions to a third party, such as a national electorate or another EU institution (Kreppel 2002: 128). Such signaling may take different forms. PGs may want to demonstrate high cohesion on a particular matter of public policy to publicize its policy agenda, expose the positions of MEPs in a rival PG on a particular policy, embarrass a rival PG by revealing its low cohesion on a particular policy, or use roll calls to distinguish themselves publicly from other PGs on particular policies they deem significant. Thus, for a number of reasons PGs may be requesting RCVs strategically in an effort to signal policy positions to third parties.

If these arguments are correct, selection bias will be a major problem whether one is interested in questions of intra-party unity or inter-party policy conflict. First, one of the main findings in the EP literature is an objectively high level of PG cohesion. If the arguments presented above are correct, we cannot trust such conclusions because the decision to request a roll call is endogenous to the level of cohesion. That is, whether a roll call is requested or not depends upon the anticipated level of cohesion in the requesting PG and/or that of its competitors.

Second, the signaling arguments imply that the sample of RCVs is endogenous to the policy agendas of the PGs requesting roll calls. That is, PGs request roll calls to highlight particular policy conflict and consensus among party groups or MEPs they consider advantageous and to de-emphasize conflict or consensus they deem disadvantageous. Thus, the selection of votes for roll call may diverge in important ways from a random sample of policy areas. As a result, our inferences from roll call votes about the character of policy conflict and the dimensionality of voting cleavages may be misleading.

Note that many previous studies of RCV recognize the potential problem of selection bias (Thomassen, Noury, and Voeten 2002; Bardi 2002; Kreppel 2001; Hix 2001a, 2002; Hix, Noury, and Roland 2002). For example, Kreppel (2002: 129) states:

Because there are numerous strategic reasons for calling roll call votes, in most cases it is impossible to know why any individual RCV was called without an in-depth analysis of the particular circumstances. As a result it is extremely difficult to infer, based on the results of an analysis of roll call voting, what occurs the rest of the time in terms of voting cohesion and coalition formation.

Similarly, Hix, Noury, and Roland (2002: 6) state that:

We cannot exclude the possibility that MEP behavior is different in roll call votes than in other votes. However, it is reasonable to assume that roll call votes are used for the most important decisions. Also, roll call votes are the only votes we can study in detail, the number of roll call votes has increased over time, roll call votes are called on the full range of issues in the European

---

<sup>8</sup> One could also imagine that PG leadership might use roll calls to monitor whether members

Parliament, and roll call votes do not appear to be called disproportionately by any party group. We can thus be confident that the systematic analysis of roll call votes provides an accurate picture of the European Parliament.

Hix (2001a; 2002a) provides a very similar defense of RCVs as a reasonable sample of MEP legislative behavior.

In spite of these statements of acknowledgement, all past studies have then proceeded to analyze RCVs with minimal tempering of their inferences to reflect any selection bias.<sup>9</sup> This is understandable, since, as Hix (2001: 668) rightly points out, we currently have no evidence that RCVs mischaracterize legislative voting behavior. But given the theoretical concerns raised above, we remain concerned that RCVs may significantly misrepresent MEP voting behavior. Thus, in the following section, we provide the first evaluation of whether RCVs are representative of legislative votes for the purpose of inferring PG cohesion and the character of PG competition in the EP.

### 3. Data and Analysis

The previous section demonstrated that there are theoretical reasons to be concerned both about what types of votes are analyzed in studies that pool RCVs and about sampling bias in RCVs due to strategic considerations. But do these potential inferential problems obtain in the actual selection of votes for roll call? To evaluate this question, we collected and analyzed a novel dataset including all votes in the EP plenary sessions from July 1999 to June 2000—the first year of the fifth directly elected EP.<sup>10</sup> We chose this year because it was readily comparable with data on RCVs from that period already collected and analyzed in Hix (2001; 2002).

---

honor vote-trades across issues.

<sup>9</sup> Some scholars, recognizing this problem, have focused instead on the policy positions of MEPs revealed in surveys (Schmitt and Thomassen 1999; Thomassen, Noury, and Voeten 2002). While we consider these studies as valuable complements to roll call studies, they have limitations for studying legislative voting behavior. Legislative votes reflect induced preferences on specific policy proposals that may not be reflected in a survey response to a general policy question. Moreover, if we want to understand the behavior of MEPs within the constraints of their PG membership, then we need to observe their preferences and behavior under these constraints.

<sup>10</sup> The data were collected from the Minutes of the Proceedings of Plenary Sessions, acquired from *Europarl: The European Union On-Line* ([www.europarl.eu.int/plenary/default\\_en.htm](http://www.europarl.eu.int/plenary/default_en.htm)).

Details of the complete dataset are available in the appendix. Here we focus on just four attributes of these votes: 1) the **method of vote**; 2) the **type of motion**; 3) the **responsible committee** for each legislative motion; and 4) the **requesting group** for each RCV. The method of vote indicates whether the vote was by roll call or not.<sup>11</sup> This vote characteristic is obviously the focus of our analysis.

The type of motion category indicates whether the vote was on a resolution, on a legislative proposal considered under the consultation procedure, on a legislative proposal considered under the assent procedure, or on a legislative proposal considered under the Codecision procedure. If the vote was under the Codecision procedure, we also identify whether the vote was in round I, II, or III. By examining the type of motion the RCVs cover, we can learn three things. First, what proportion of RCVs cover the “most important” votes? The lower the proportion, the more we should be concerned about pooling RCVs to study voting behavior on EU legislation. Second, is there evidence that RCVs are being requested strategically? The extent of this problem will be indicated by the level of divergence between RCVs and the universe of votes in terms of type of motion. And third, is the sample obviously biased towards or away from the “most important” votes? A strong bias away from most important votes should leave us even more concerned about what we can infer from RCVs about MEP voting behavior on EU legislation.

The responsible committee category indicates the name of the committee responsible for reporting the motion to the floor.<sup>12</sup> While committee jurisdictions occasionally overlap and some legislative proposals concern multiple issue areas—and therefore multiple committees, each committee has jurisdiction over specific policy areas, such as agriculture, tourism, or fisheries.<sup>13</sup> Thus, an analysis of which responsible committees’ legislative texts are voted on by roll call provides a reasonable, objective standard by which to evaluate what issue areas tend to see roll call votes. Determining whether RCVs are a random sample by issue area provides additional, valuable information over whether RCVs are accurately portraying party group cohesion and conflict. If only certain issue areas tend to see RCVs,

---

<sup>11</sup> The EP uses one of four methods for casting votes: 1) voice; 2) hand; 3) electronic; or 4) roll call. Voice and hand votes only record whether the motion passed, electronic votes record the final tally of the vote, and roll call votes record exactly how each legislator voted. The default method of voting is by voice or hand. Electronic votes occur when a voice or hand vote is too close to call, and RCVs occur if a party group or thirty-two members issue a formal request for a roll call.

<sup>12</sup> Responsible committees are fairly powerful entities within the Parliament, and they have significant control over legislation. Committee assignments are made in order to facilitate specialization; therefore, MEPs are placed in committees according to their occupational expertise or constituents’ interests (Hix 1999; Bowler and Farrell 1995).

<sup>13</sup> Committee jurisdictions are defined in the EP Rules of Procedure, Annex VI.

then issue areas in which there are high levels of within PG dis-cohesion and across PG cohesion may be hidden in the non-recorded votes. Thus, finding that RCVs are not a representative sample by issue area would be additional evidence that RCVs are being strategically selected and that the existing literature's findings may be substantially biased.<sup>14</sup>

Finally, we coded which EP party group, if any, requested the RCV. If RCVs are a random sample of legislative votes, we would expect requests to be, in some sense, proportionally distributed across party groups. To test this hypothesis, we evaluate whether requests are proportional by two standards: 1) whether they are evenly distributed across party groups; and 2) whether they are distributed proportional to party group size. If RCVs are not proportionally distributed across party groups by either of these standards, this again would be evidence that roll call votes are being requested strategically, and therefore that we should be concerned about the literature's existing findings.<sup>15</sup> Further, because different party groups have different legislative agendas, if we observe some party groups disproportionately requesting RCVs, it is even more likely that these votes do not accurately characterize policy cleavages within the EP.

Note that the previous literature has not reached consensus on what counts as a vote. Some studies suggest that it is important and relevant to include votes on amendments when studying RCVs (Hix 2001a, Hix 2001b, Hix forthcoming, Kreppel and Tsebelis 1999, Raunio 1997). Others ignore amendments and focus only on final votes (Attina 1992; Brzinski 1995). Thus, to be consistent with past studies, we report results under both conventions.

## **Methodology**

The critical inferential issues here are descriptive: 1) what votes are being pooled in RCV analyses, and 2) are RCVs an unbiased sample of EP votes. The first question is answered through simple frequency tables. The second question is answered mainly through standard statistical tests of significance for differences between the sample of votes—the roll call votes—and the population of votes. The null hypothesis throughout the ensuing analysis is

---

<sup>14</sup> Note, if we find that RCVs are unrepresentative by procedure we almost certainly have to find that RCVs are also unrepresentative by issue area. The issue area of a bill to a great degree determines the procedure it will be voted under. However, we believe it is still important to demonstrate the sample properties of RCVs by issue because 1) it demonstrates with certainty whether the sample is biased, and 2) it allows us to directly evaluate to what degree and in what ways the sample is biased.

<sup>15</sup> Note that these three characteristics closely map to the three characteristics that Hix, Noury, and Roland (2002) explicitly state, as quoted previously, are the three critical issues in identifying a problem with selection bias. The type of motion reveals information about the importance of the vote, the responsible committee of the motion provides information about the range of issues considered by roll call, and the distribution of RCV requests across PGs allows us to assess whether any PG disproportionately requests roll calls.

that any deviation in the distribution of RCVs across the relevant categories (e.g., the legislative procedures) from that of the population of votes is due to chance. In other words, the null hypothesis is the assumption, sometimes implicit, justifying past RCV analyses. We evaluate this hypothesis with z-tests and chi-squared tests, depending on the character of the question. We analyze the 1999-2000 EP legislative period.

### **Evaluating the Pooling and Sampling Properties of RCVs by the Type of Motion**

Table 1 presents the frequencies and percentages of each of the types of motions for RCVs on final votes and RCVs on final votes and amendments. As can be seen, when only final votes are analyzed, the most common vote is a resolution, the second most common vote is a Consultation vote, the third most common vote is a Codecision I vote, and the least common votes are Codecision II, Codecision III, and Assent votes. In fact, of the 141 roll calls on final votes, only three are Codecision II, Codecision III and Assent votes. That is, the votes on which the EP can directly affect the legislative outcome comprise just *two percent* of the observations.

This disparity is even more dramatic when amendments are included. There are five Codecision II, III and Assent RCVs when amendments are included out of a total of 1,297. Thus, when amendments are included these votes comprise less than *0.5%* of the observations. If we care about how MEPs vote on the “most important” legislative motions, as Hix, Noury and Roland (2002) state, these are not desirable distributions.

[Table 1 here]

Now consider the sample properties of the RCVs. First, simply consider frequencies between resolutions and legislative votes. As table 2 demonstrates, if we only consider final votes, resolutions make up a slightly larger, but not statistically significantly larger, proportion of RCVs than they do of all votes ( $X^2=1.82$ ). However, once amendments are also included, they comprise a massively larger proportion of RCVs than of all votes ( $X^2=756.3$ ). Thus, we can reject the null hypothesis that RCVs are drawn randomly from the population of votes. Rather, PGs are systematically requesting more RCVs on resolutions.

[Table 2 here]

Next consider frequencies among the various types of legislative votes. As table 3 demonstrates, if we only consider final votes, Consultation votes and Codecision I votes comprise a larger percentage of RCVs than they do of all votes, while Codecision II, III and Assent votes comprise a smaller percentage of RCVs than they do of all votes. While these differences could be due to chance, a chi-squared test rejects this possibility ( $X^2=22.02$ ). Thus, the evidence suggests that RCVs are systematically selected to under-represent final legislative votes. This pattern is only more pronounced when amendments are considered as well, because Codecision II, III and Assent votes are even more under-sampled. The chi-squared test reflects this increased disparity, easily rejecting the null that the sample is due to chance ( $X^2=88.57$ ).

As one last point on this issue, note that we can also reject the null hypothesis that the sample of RCVs is randomly selected when we treat resolutions as just another type of legislative motion. That is, if we consider resolutions and the various types of legislative votes simultaneously, we reject the null hypothesis that the sample is due to chance on both final votes ( $X^2=11.8, p<.05$ ) and all votes ( $X^2=770, p<.001$ ).

[Table 3 here]

Three important implications can be drawn from this first step in the analysis. The first is simply that there is demonstrable evidence that RCVs are systematically requested according to the type of motion. Whether we consider just the difference between resolutions and legislative motions, just the difference among legislative motions, or resolutions and types of legislative motions simultaneously, RCVs are not a random sample of the population of votes.

Second, we noted that the votes that can reasonably be considered most important, Codecision II, III, and Assent, comprise an extremely small proportion of the RCVs. And, all three types of votes are underrepresented as a proportion of the total population of votes. Thus, these most important votes are specifically not decided by roll call. One out of sixteen Assent votes and three out of 619 Codecision II votes had roll calls requested. As the chi-squared test demonstrates, *this is not by accident or chance*.

Finally, what do these findings suggest for the study of MEP voting behavior? If we care about analyzing why MEPs vote the way they do, not just on important legislation, but in general, these data are problematic. The sample is clearly not a random sample of the population of votes, so analysis are likely to generate biased results. If we care about



analyzing why MEPs vote the way they do on important legislation, these results are even more damning. Not only are we looking predominantly at the wrong votes, but it is clear that PGs are systematically selecting against exactly the kind of votes we most care about.

### *A Caveat on 'Most Important' Votes*

Note that one might argue we are understating the significance of non-binding votes – i.e. Codecision I votes, Consultation votes, and Resolutions – because the signaling value of these votes induces MEPs to treat them like votes on actual EU legislation. For Codecision I votes, this claim is not implausible. While we would argue that the Codecision II, and III votes are still more important because they are the votes that directly affect legislative outcomes, Codecision I votes could well be used by the EP to signal policy positions to the Council in anticipation of the round II and III votes. For Consultation votes this argument is not plausible. Since the EP can never do more than issue an opinion under the Consultation procedure, there is no reason for the Council to take its position into account.<sup>16</sup>

Finally, for resolutions the situation is somewhat more ambiguous. On the one hand, resolutions can be used to signal policy positions to the Commission on potential or future legislative proposals. For example, the EP passed three resolutions between 1984 and 1989 requesting the Commission to protect media pluralism in a directive designed to liberalize cross-national broadcasting (Harcourt 1998: 375). For issue areas that would fall under the Codecision procedure, these signals may be important since, again, the EP will eventually be able to cast binding votes on the topic. On the other hand, many resolutions are simple position-taking statements on current events and not associated with some potential policy. Thus, the proper characterization of resolutions is ambiguous in terms of their “legislative” nature.

However, even with a generous characterization of what constitutes an important vote, our previous conclusions stand. To see why, consider the following two scenarios. First, imagine that half of the resolutions and all Codecision I votes are put on par with Codecision II, III, and Assent votes. The sample of RCVs would remain highly contaminated with legislatively insignificant votes. Sixty-three out of 141 final votes and 665 out of 1297 total votes remain legislatively insignificant resolutions and Consultation votes. Thus, if we are interested in MEP behavior on important votes, then the sample would remain undesirable.

---

<sup>16</sup> On this point see the previous discussion of the Consultation procedure.

Second, one might argue that all RCVs on resolutions should be considered important simply because those are the ones that PGs considered important enough to decide by RCV. It turns out that the typical roll call vote on a resolution is an amendment (478 of 594), of which a majority are called by the Verts/ALE, the TDI, or the UEN (260), of which most are rejected (220). Thus, we have to believe that rejected amendments to non-binding resolutions by three small party groups are important votes, on par with votes that actually, directly influence EU legislative outcomes. Further, we also have to assume that such votes are indicative of the character of policy conflict in the EP over the EU legislative agenda. Otherwise, our estimate of inter-party policy conflict based on these RCVs is necessarily inaccurate. One might seriously doubt that the policy agenda of these groups, particularly on amendments to resolutions, reflects the overall EU legislative agenda.

### **Evaluating the Sampling Concern: RCVs by Responsible Committee**

Now consider the distribution of RCVs by responsible committee. As Table 4 shows, there were nineteen committees in the 1999-2000 EP. The table reports the number and proportion of votes on texts referred out of each of these committees for RCVs and for all votes. If RCVs are representative in terms of the breadth of policy areas, then we should not reject the null hypothesis that the distribution of RCVs only differs from the distribution for the full set of votes due to chance. As the Chi-squared statistic in table 4 indicates, the null hypothesis is rejected at a very high level of statistical significance. The distribution of policy areas, represented by committee affiliation, of RCVs is significantly different from that of the full set of votes. More specifically, looking at table 4, we see that a majority of RCVs originate in just a few committees. The committee for Citizens' Freedoms and Rights, Justice and Home Affairs (LIBE), Constitutional Affairs (AFCO), and Economic and Monetary Affairs (ECON), have the highest percentages of RCVs. Combined, these three committees account for 63.88% of RCVs, but only 28.35% of all votes. That is, the percent of RCVs is *more than 100%* higher than the percent of all votes.

[Table 4 here]

When we examine amendments and final votes in table 5 we observe that this trend strengthens. Not only is the distribution significantly different in both tables, but even with amendments included, four committees still have no RCVs. For example, there were fifty votes on amendments or final texts from the FEMM committee but none by roll call. Thus,

while issues of women's rights or equal opportunities may be highly conflictual among MEPs, an analysis of RCVs would overlook this conflict.

[Table 5 here]

This result has important implications for the literature's key findings regarding intra-party cohesion and inter-party policy conflict. To illustrate these implications, consider figure 1 below. The horizontal axis measures policy positions in the left-right space and the vertical axis measures policy positions in terms of integration. Each point represents the median position of a national delegation in either party group A or party group B. We represent the EU legislative agenda by three proposals, P1, P2, and P3.

[Figure 1 here]

If MEPs voted simply according to their party delegation ideal points, then the actual character of conflict would be two-dimensional and we would observe varying levels of party group cohesion. However, we would reach erroneous conclusions about cohesion if roll calls were only called on some of these legislative initiatives. For example, if a RCV were called only on P1, both party groups would appear cohesive; if a RCV were called only on P2, one of the two would appear cohesive; and, if a RCV were called on P3, neither would appear cohesive. Furthermore, if PG leaders are requesting RCVs to signal a desirable PG position, an undesirable position on the part of an adversary, or a lack of a committed position by an adversary, we would see RCV requests that lead to a misleading characterization of the policy conflict. These motivations would cause a PG to request a RCV on P1 or P2, but not P3. Only if PGs are requesting RCVs to promote party discipline might we observe a RCV on P3, but then we would observe high cohesion from the requesting group specifically because the PG is requesting it in order to exert discipline. Thus, of the reasons RCVs are argued to occur, most would lead to the selection of policies that are predominantly in the left-right space, and all would predict selection of votes that demonstrate a higher level of party cohesion than really exists.

As a side note, it is also important to realize that those committees most likely to deal with socioeconomic issues related to the left-right ideological dimension have a relatively small number of RCVs. Hix (2001: 680), in his RCV analysis, identified social policies and

environmental policies as key components of this left-right dimension.<sup>17</sup> The tables show that votes on texts from the related committees – the Employment and Social Affairs committee and the Environment, Public Health, and Consumer Policy committee – are relatively rare among RCVs. For example, the EP held only one RCV on texts from EMPL. Why does this matter? Hix (2001), and much of the related literature, conclude that PG coalitions tend to organize by ideology (i.e. PGs of the left tend to vote together and PGs of the right tend to vote together). However, the fewer the number of votes used to estimate intra-party cohesion and inter-party conflict in a particular policy area, the less confidence we should have in how accurately those votes are representing the true levels of cohesion and conflict in that area. Thus, even in the best circumstances —i.e., where the selection of the RCVs is random, because these conclusions are based upon a very small sample of left-right ideological votes it is quite possible that these votes would still misrepresent voting behavior on left-right issues.

### **Sampling Bias: RCVs by Requesting Group**

Finally, consider the distribution of RCVs by requesting group. Table 6 indicates the number of RCV requests in the 1999-2000 legislative session by party group.

[Table 6 here]

The results again support the supposition that PGs request RCVs for strategic reasons. First, from a simple cursory examination of the data it is obvious that roll call votes are not being requested evenly across party groups. The two largest party groups – the PPE and the PSE – as well as a few of the smaller party groups – Verts/ALE, TDI, and the ELDR – are requesting the bulk of the roll calls. Second, whether you consider final votes alone, amendments alone, or total votes, roll call votes are also not being requested proportional to party group size. A chi-squared test rejects the null hypothesis that roll call requests are being requested proportional to party size at the .001 threshold. Thus, contrary to Hix's claim, roll call votes are not being proportionally requested by any reasonable standard.

In fact, these findings suggest that the strategic component to requesting roll calls is very substantial. First and most obviously, the actual pattern in roll call vote requests is massively divergent from proportional. As the chi-squared test demonstrates, the PSE is

---

<sup>17</sup> Hix (2001: 680) also identified expenditure policies as defining the left-right dimension in the EP. However, it is unclear how to translate his definition of these policies into committees.

calling very few roll calls relative to its size, while the TDI and the Verts/ALE are calling a huge number. Second, if you compare requesting patterns between final votes and amendments, it is clear that different groups are using RCVs for different purposes. The PPE are requesting the bulk of the RCVs on final votes (47.49%), while the Verts/ALE, the TDI, and the ELDR are requesting the bulk of the RCVs on amendments (26.95%, 12.91%, and 11.77%, respectively). Thus, without speculating as to why, it is clear that the plurality party sees value in requesting roll call votes primarily on final votes, while three of the smaller PGs of the chamber see value in requesting roll call votes on amendments.

These findings have important implications for the two main conclusions of the literature. Most obviously, this apparent pattern in roll call vote requests suggests that party groups are clearly manipulating the use of RCVs. However even more interestingly, this pattern also suggests that the characterization of the policy space is almost certainly distorted. Unless the policy agendas of groups such as the Greens and the technical group of unaligned MEPs have legislative agendas that are representative of the EU legislative agenda, these RCVs are providing a biased sample of policy areas covered by legislative proposals. Thus, this is further evidence not only that RCVs are being strategically requested, but that they almost certainly are mischaracterizing the major dimensions of policy conflict in the EP.

#### **4. Conclusion**

Our analysis supports two direct observations about RCVs in the 1999-2000 EP legislative session. First, roll calls are disproportionately being called on what should broadly be considered the less important votes. Almost no RCVs are requested on votes that can directly influence policy outcomes and relatively few RCVs are requested on votes that even indirectly can influence policy outcomes. Further, this problem is substantially exacerbated when amendments are included. Thus, to the degree that we are interested in evaluating legislative behavior – including cohesion, discipline, and the character of the policy space – on votes that matter, this result suggests at a minimum that scholars need to consciously select out the clearly unimportant votes.

Second, and of more general importance to students of legislative behavior, there is overwhelming evidence that RCVs are not a random sample of legislative votes. Roll calls are systematically biased according to legislative procedure, by issue area, and by requesting group. Further, the directions of bias are extremely concerning. It is clear that RCVs under-

represent exactly the types of votes that would be considered most important. This suggests that the votes scholars would be most interested in analyzing for understanding legislative behavior in the EP are exactly those votes that RCVs select out. Further, it is clear that different groups are using RCVs for different purposes. The major party groups – the PPE and the PSE – tend to call RCVs on final votes, while the smaller groups with more distinct legislative agendas – the Verts/ALE, the TDI, and the UEN – tend to call RCVs on amendments. Thus, not only is it clear that there is selection bias in the RCV data, but the form it is taking is complex, with different groups calling RCVs for different purposes.

These findings have substantial implications for existing findings on cohesion, discipline, and the dimensionality of policy conflict. With a RCV sample that not only selects away from binding votes, but further that ends up consisting of at best *two percent* of binding votes, there is no way to draw conclusions over issues of cohesion, discipline or the dimensionality of policy conflict on these most important votes. Further, there is every reason to believe that the characterization provided by the less important votes does not generalize to the most important ones. As the analysis by issue area demonstrates, we are observing an unrepresentative sample of votes that only covers a subset of the universe of policy areas. Thus, it is clearly difficult to claim that these votes adequately characterize the dimensionality of policy conflict in the EP. Finally, we observe party groups such as the Greens dominating the decision to request RCVs. Thus, unless we are willing to believe that the Green's policy agenda reflects that of the chamber as a whole, we must treat RCVs as poor indications of the character of legislative conflict in the EP.

These problems with RCVs, and the analyses of the EP that use them, have broad consequences for our understanding of EU governance. Recall that RCV studies have indicated that party groups fit the responsible party model, at least in terms of legislative parties, rendering the EP a “normal” parliament. This evidence has been used to support arguments for institutional reforms to strengthen the EP so as to improve the link between voters and policy-makers in the EU. Our analysis indicates that such conclusions and arguments are suspect; RCVs likely provide a poor test of whether party group cohesion and competition in the EP is consistent with the responsible party model.

The implications of these findings go far beyond just the study of the EP. Clearly, any legislative chamber that does not call the majority of its votes by roll call may suffer from the same problems of selection bias as the EP. Such chambers are fairly common. For example, the Chilean Senate (Londregan 2002), the Argentine Chamber of Deputies (Jones 2002), the Brazilian Chamber of Deputies (Ames 2002), and the Swiss National Council

(Lanfanchi and Lüthi 1999) vote on only a fraction of their legislation by roll call. Further, to the degree that we are observing this selection bias in a chamber with relatively weak centralized authority in the party groups, we should expect that the incentives to strategically call roll call votes and the ability to do so will only be greater in systems with stronger parties. Thus, this paper serves as a first cut at demonstrating the existence and character of a problem that is likely to be endemic to legislative studies across a broad range of countries and institutions.

As a final note, we do not advocate abandoning the use of RCVs to analyzing legislative behavior. Rather, we believe the next logical step in RCV studies is to derive and incorporate an explicit model of RCV requests that will allow scholars to control for these biases when they analyze RCVs. Fortunately, as discussed earlier, previous studies provide valuable information about the motivations and context of roll call vote requests (e.g., Kreppel 2002). Based on these studies, we can develop models of roll call vote requests that make specific predications that we could then test against the observed data on requesting behavior. The identification of an appropriate theoretical model of roll call vote request could then be used to estimate empirical models of legislative voting behavior on RCV data. Such selection bias models RCV data would temper our inferences about party cohesion and the dimensionality of party conflict in light of the selection process.

Table 1. Percent and Number of RCVs by Type of Motion		
Type of Motion	Final Votes	Final Votes and Amendments
	% <i>Raw numbers</i>	% <i>Raw numbers</i>
Resolution	58.9 <b>83</b>	86.7 <b>1124</b>
Consultation	25.5 <b>36</b>	7.9 <b>103</b>
Codecision I	13.5 <b>19</b>	5.0 <b>65</b>
Codecision II	.7 <b>1</b>	.2 <b>3</b>
Codecision III	.7 <b>1</b>	.08 <b>1</b>
Assent	.7 <b>1</b>	.08 <b>1</b>
Codecision II, III and Assent	2 <b>3</b>	.39 <b>5</b>
<b>Total</b>	<b>141</b>	<b>1297</b>



Table 2. Percent and Number of votes and RCVs by type of Motion				
Type of Motion	All Final Votes	All RCVs on Final Votes	All Votes	All RCVs
	% <i>Raw numbers</i>	% <i>Raw numbers</i>	% <i>Raw numbers</i>	% <i>Raw numbers</i>
Legislation	46.75 <b>324</b>	41.13 <b>58</b>	51.52 <b>2405</b>	13.34 <b>173</b>
Resolutions	53.25 <b>369</b>	58.87 <b>83</b>	48.48 <b>2263</b>	86.66 <b>1124</b>
Total	693	141	4668	1297
Chi-Square Statistic	1.82 (p < .18)		756.3 (p < .001)	

<b>Table 3. Percent and Number of Votes and RCVs by Type of Legislative Vote</b>				
<b>Type of Motion</b>	<b>All Final Votes</b>	<b>All RCVs on Final Votes</b>	<b>All Votes</b>	<b>All RCVs</b>
	<i>% Raw numbers</i>	<i>% Raw numbers</i>	<i>% Raw numbers</i>	<i>% Raw numbers</i>
<b>Consultation</b>	45.83 <b>176</b>	60.00 <b>36</b>	45.24 <b>1088</b>	59.54 <b>103</b>
<b>Assent</b>	4.17 <b>16</b>	1.67 <b>1</b>	0.67 <b>16</b>	0.58 <b>1</b>
<b>Codecision I</b>	18.75 <b>72</b>	31.67 <b>19</b>	27.90 <b>671</b>	37.57 <b>65</b>
<b>Codecision II</b>	12.76 <b>49</b>	1.67 <b>1</b>	25.74 <b>619</b>	1.73 <b>3</b>
<b>Codecision III</b>	2.86 <b>11</b>	1.67 <b>1</b>	0.46 <b>11</b>	0.58 <b>1</b>
<b>Codecision II, III, and Assent</b>	23.5 <b>76</b>	5.2 <b>3</b>	26.9 <b>646</b>	3.9 <b>5</b>
<b>Total</b>	324	58	2405	173
<b>Chi-Square Statistic</b>	22.02 (p < .001)		88.57 (p < .001)	

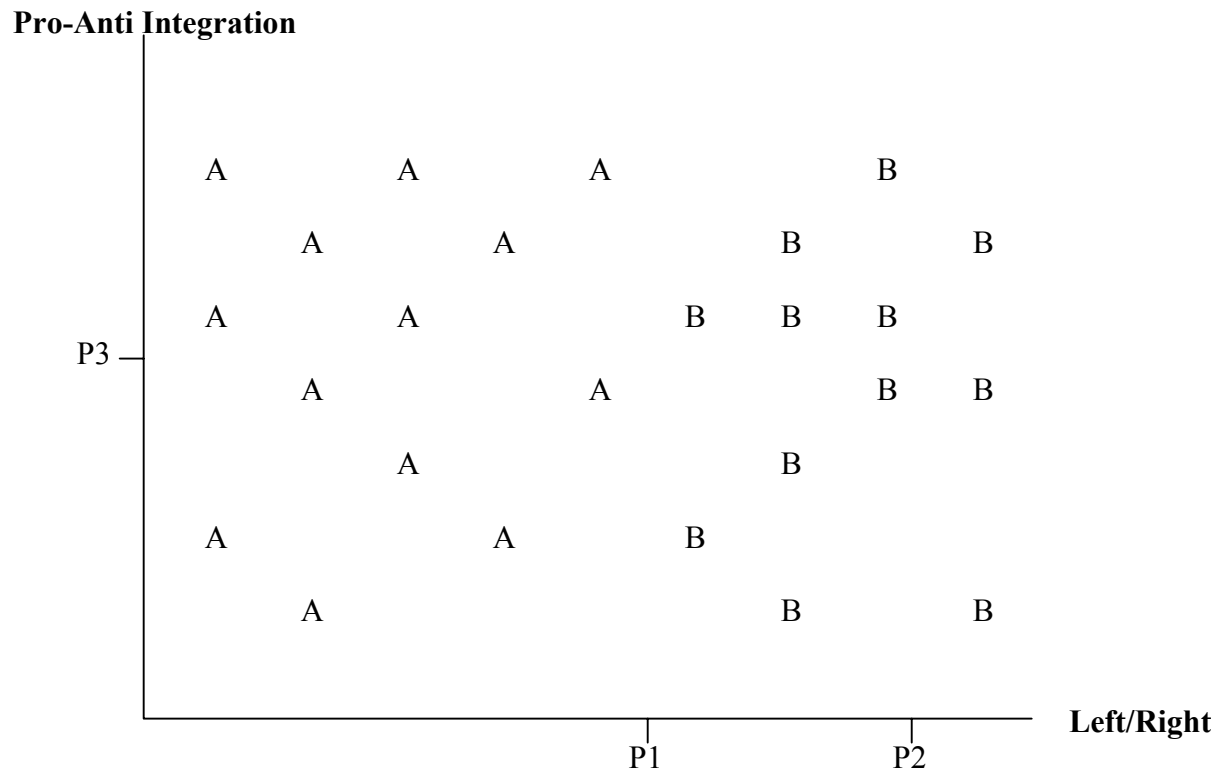
Table 4. Responsible committee by all votes and RCVs (Final Votes)			
Committees	All votes		RCVs
	% Raw numbers	% Raw numbers	% Raw numbers
Agriculture and Rural Development (AGRI)	10.22 47	15.69 16	
Budgetary Control (CONT)	6.09 28	1.96 2	
Budgets (BUDG)	5.43 25	6.86 7	
Citizens' Freedoms and Rights, Justice and Home Affairs (LIBE)	8.26 38	10.78 11	
Parliament's delegation to the Conciliation Committee	2.39 11	0.98 1	
Conference of Presidents	0.43 2	0.00 0	
Constitutional Affairs (AFCO)	1.74 8	4.90 5	
Culture, Youth, Education, the Media and Sport (CULT)	2.17 10	0.00 0	
Development and Cooperation (DEVE)	2.83 13	0.98 1	
Economic and Monetary Affairs (ECON)	8.48 39	13.73 14	
Employment and Social Affairs (EMPL)	2.61 12	0.98 1	
Environment, Public Health and Consumer Policy (ENVI)	10.22 47	5.88 6	
Fisheries (PECH)	6.52 30	9.80 10	
Foreign Affairs, Human Rights, Common Security and Defence Policy (AFET)	5.00 23	2.94 3	
INDU	1.52 7	0.00 0	
Industry, External Trade, Research and Energy (ITRE)	9.78 45	5.88 6	
Legal Affairs and the Internal Market (JURI)	8.04 37	8.82 9	
Regional Policy, Transport and Tourism (RETT)	6.96 32	9.80 10	
Women's Rights and Equal Opportunities (FEMM)	1.30 6	0.00 0	
<b>Total</b>	<b>460</b>	<b>102</b>	
<b>Chi-Squared Statistic</b>	<b>46.95 (p &lt; .001)</b>		

Table 5. Responsible committee by all votes and RCVs (Final Votes and Amendments)		
Committees	All votes	RCVs
	% <i>Raw numbers</i>	% <i>Raw numbers</i>
Agriculture and Rural Development (AGRI)	5.26 <b>212</b>	5.99 <b>65</b>
Budgetary Control (CONT)	2.36 <b>95</b>	3.87 <b>42</b>
Budgets (BUDG)	10.79 <b>435</b>	6.82 <b>74</b>
Citizens' Freedoms and Rights, Justice and Home Affairs (LIBE)	13.22 <b>533</b>	16.04 <b>174</b>
Parliament's delegation to the Conciliation Committee	0.27 <b>11</b>	0.09 <b>1</b>
Conference of Presidents	0.20 <b>8</b>	0.00 <b>0</b>
Constitutional Affairs (AFCO)	9.20 <b>371</b>	33.00 <b>358</b>
Culture, Youth, Education, the Media and Sport (CULT)	2.16 <b>87</b>	0.00 <b>0</b>
Development and Cooperation (DEVE)	1.54 <b>62</b>	0.09 <b>1</b>
Economic and Monetary Affairs (ECON)	5.93 <b>239</b>	14.84 <b>161</b>
Employment and Social Affairs (EMPL)	2.58 <b>104</b>	1.47 <b>16</b>
Environment, Public Health and Consumer Policy (ENVI)	19.02 <b>767</b>	0.55 <b>6</b>
Fisheries (PECH)	3.67 <b>148</b>	2.76 <b>30</b>
Foreign Affairs, Human Rights, Common Security and Defence Policy (AFET)	4.74 <b>191</b>	2.76 <b>30</b>
Industry, External Trade, Research and Energy (ITRE)	8.87 <b>358</b>	5.81 <b>63</b>
Legal Affairs and the Internal Market (JURI)	4.61 <b>186</b>	3.50 <b>38</b>
Regional Policy, Transport and Tourism (RETT)	4.36 <b>176</b>	2.40 <b>26</b>
Women's Rights and Equal Opportunities (FEMM)	1.24 <b>50</b>	0.00 <b>0</b>
<b>Total</b>	<b>4033</b>	<b>1085</b>
<b>Chi-Squared Statistic</b>	<b>1147.5 (p &lt; .001)</b>	

Table 6. RCV Requesting Groups on Final Votes and Amendments

RCV Requesting Group	Party Group Size	Final Votes	Amendments	Total Votes
	<i># of Members</i>	<i>% Raw Numbers</i>	<i>% Raw Numbers</i>	<i>% Raw Numbers</i>
Europe of Democracies and Diversity (EDD)	16	2.33 <b>4</b>	6.81 <b>48</b>	5.88 <b>52</b>
European Liberal Democratic and Reform Parties (ELDR)	53	9.50 <b>17</b>	11.77 <b>83</b>	11.31 <b>100</b>
Communists (GUE/NGL)	50	5.59 <b>10</b>	7.80 <b>55</b>	7.35 <b>65</b>
Party of European Socialists (PSE)	175	16.20 <b>29</b>	9.79 <b>69</b>	11.09 <b>98</b>
Technical Group of Independent Members (TDI)	32	3.35 <b>6</b>	12.91 <b>91</b>	10.97 <b>97</b>
Union for a Europe of Nations (UEN)	22	2.23 <b>4</b>	9.79 <b>69</b>	8.26 <b>73</b>
Greens (Verts/ALE)	45	11.73 <b>21</b>	26.95 <b>190</b>	23.87 <b>211</b>
European Peoples' Party (PPE/DE)	233	47.49 <b>85</b>	9.93 <b>70</b>	17.53 <b>155</b>
President	-	1.12 <b>2</b>	0 <b>0</b>	.23 <b>2</b>
MEPs	-	1.12 <b>2</b>	2.41 <b>17</b>	2.15 <b>19</b>
Not Available	-	0 <b>0</b>	1.84 <b>13</b>	1.47 <b>13</b>
<b>Total</b>	<b>626</b>	<b>179</b>	<b>705</b>	<b>884</b>
<b>Chi-Squared Statistic</b>		<b>110</b>	<b>9907</b>	<b>10030</b>

**Figure 1**



**Key:**

A = national delegation from party group A

B = national delegation from party group B

## References

- Ames, Barry. 2002. "Party Discipline in the Chamber of Deputies." In Scott Morgenstern and Benito Nacif, eds. *Legislative Politics in Latin America*. Cambridge: Cambridge University Press.
- Attina, Fulvio. 1990. "The Voting Behaviour of the European Parliament Members and the Problem of the Europarties." *European Journal of Political Research* 18: 557-79.
- Bardi, Luciano. 2002. "Transnational Trends: The Evolution of the European Party System." In Bernard Steunenberg and Jacques Thomassen, eds. *The European Parliament: Moving Toward Democracy in the EU*. Oxford: Rowan and Littlefield.
- Blondel, J., Sinnott, R. and Svensson, P. 1998. *People and Parliament in the European Union*. Oxford: Oxford University Press.
- Bowler, Shawn and David Farrell. 1995. "The Organization of the European Parliament: Committees, Specialization, and Co-ordination." *British Journal of Political Science* 25(2): 219-243.
- Brzinski, Joanne Bay. 1995. "Political Group Cohesion in the European Parliament, 1989-1994." In Rhodes, Carolyn and Sonia Mazey (eds.). *The State of the European Union*. London: Lynne Reinner.
- Carey, John. Forthcoming-a. "Discipline, Accountability, and Legislative Voting in Latin America." *Comparative Politics*.
- Carey, John. Forthcoming-b. "Transparency versus collective action: Fujimori's legacy and the Peruvian Congress." *Comparative Political Studies*.
- Carey, John. 2002. "Getting Their Way or Getting in the Way?: Presidents and Party Unity in Legislative Voting." Paper presented at the annual meeting of the American Political Science Association, August 2002, Boston, MA.
- Collie, Melissa. 1985. "Voting Behavior in Legislatures." In Lowenberg, Gerhard, Samuel Patterson and Malcolm Jewell. *Handbook of Legislative Research*. Cambridge: Harvard University Press.
- Corbett, Richard, Francis Jacobs, and Michael Shackleton. 2000. *The European Parliament, 4<sup>th</sup> Edition*. London: Catermill.
- Cox, Gary and Matthew McCubbins. 1993. *Legislative Leviathan: Party Government in the House*. Berkeley: University of California Press.
- Desposato, Scott. Forthcoming. "Problem and Solution: Correcting for Bias in Roll call Cohesion Scores." *Political Analysis*.
- Desposato, Scott and . 2001. "Legislative Politics in Authoritarian Brazil". *Legislative Studies Quarterly*. 26 (May): 287-318.

- Harcourt, Alison. 1998. "EU Media Ownership Regulation: Conflict over the Definition of Alternatives." *Journal of Common Market Studies* 36 (3): 369-389.
- Haspel, Moshe, Thomas Remington, and Steven Smith. 1998. "Electoral Institutions and Party Cohesion in the Russian Duma." *Journal of Politics* 60 (2): 417-439.
- Hix, Simon. 2002a. "Parliamentary Behavior with Two Principals: Legislator Preferences, Parties and Voting in the European Parliament." *American Journal of Political Science* 46(3): 688-698.
- Hix, Simon, Abdul Noury, and Gerard Roland. 2002b. "A 'Normal' Parliament?: Party Cohesion and Competition in the European Parliament, 1979-2001." *EPRG Working Paper*, no. 9.
- Hix, Simon. 2001a. "Legislative Behaviour and Party Competition in the European Parliament: An Application of Nominate to the EU." *Journal of Common Market Studies*. 39(4): 663-88.
- Hix, Simon. 2001b. "Which Electoral System for the European Parliament? How Electoral Rules Shape MEP Voting Behaviour." Presented at Conference on Democratic Institutions for a Large European Union. Florence, Italy.
- Hix, Simon. 1999. *The Political System of the European Union*. New York: St. Martin's Press.
- Jones, Mark. 2002. "Explaining the High Level of Party Discipline in the Argentine Congress." In Scott Morgenstern and Benito Nacif, eds. *Legislative Politics in Latin America*. Cambridge: Cambridge University Press.
- Krehbiel, Keith. 1991. *Information and Legislative Organization*. Ann Arbor: University of Michigan Press.
- Kreppel, Amie. 2002. *The European Parliament and Supranational Party System*. Cambridge: Cambridge University Press.
- Kreppel, Amie. 2000. "Rules, Ideology and Coalition Formation in the European Parliament: Past, Present and Future." *European Union Politics* 1 (3): 340-362.
- Kreppel, Amie and George Tsebelis. 1999. "Coalition Formation in the European Parliament." *Comparative Political Studies*: 32 (8): 933-66.
- Lanfranchi, Prisca and Ruth Lüthi. 1999. "Cohesion of Party Groups and Interparty Conflict in the Swiss Parliament: Roll Call Voting in the National Council." In Shaun Bowler, David Farrell and Richard Katz, eds. *Party Discipline and Parliamentary Government*. Columbus: Ohio State University Press.
- Londregan, John. 2002. "Appointment, Reelection, and Autonomy in the Senate of Chile." In Scott Morgenstern and Benito Nacif, eds. *Legislative Politics in Latin America*. Cambridge: Cambridge University Press.



Londregan, John. 1999. "Estimating Legislators' Preferred Points." *Political Analysis* 8 (1): 35-56.

Noury, Abdul. 2002. "Ideology, Nationality, and Euro-Parliamentarians." *European Union Politics* 3 (1): 33-58.

Raunio, Tapio. 1999. "The Challenge of Diversity: Party Cohesion in the European Parliament." In Shaun Bowler, David Farrell and Richard Katz, eds. *Party Discipline and Parliamentary Government*. Columbus: Ohio State University Press.

Raunio, Tapio. 1997. "Aggregating Interests Within and Between Party Groups in the European Parliament: MEP Voting Behaviour, 1989-1994." *The European Perspective: The Transnational Party Groups in the 1989-1994 European Parliament*. Aldershot: Ashgate.

Raunio, Tapio. 1996. *Party Group Behavior in the European Parliament: An Analysis of Transnational Political Groups in the 1989-94 Parliament*. Acta Universitatis Tamperensis, Vammalan Kirjapaino, Vammala, Finland.

Schmitt, Hermann and Jacques Thomassen. 1999. *Political Representation and Legitimacy in the European Union*. Oxford: Oxford University Press.

Thomassen, Jacques, Abdul Noury, and Erik Voeten. 2002. "Political Competition in the European Parliament: Evidence from Roll Call and Survey Analyses." In Marks, Gary and Marco Steenbergen, Eds. *Dimensions of Contestation in the European Union*. Cambridge: Cambridge University Press.

## Appendix

The information that was collected and coded can be divided into three main categories, the first of which is identification and general vote information. This category includes the title of the vote, the date that the vote occurred, where the vote took place (Strasbourg or Brussels), and EP and EU reference information (i.e. the Commission Text number). The second category includes more specific information about the vote, such as the type of vote, the responsible and opinion committees (if they existed), the procedure and the voting rule under which the vote was considered, the name of the rapporteur, whether or not there was a debate, the method of vote, the RCV requesting group (if the vote was a RCV), the final voting numbers (yeas, nays, abstentions, and number present), and finally, whether or not the vote passed. The third category includes the details of amendments, such as the number of amendments (total, adopted, and rejected), the method of vote on the amendments, the RCV requesting group (again if a RCV occurred), and the number of amendments withdrawn, fallen, not put to vote, cancelled, and ruled inadmissible. The same information was collected for split votes and parts of text when it was available, in addition to the number of separate votes that were taken.