Using MP statements to explain voting behaviour in the German Bundestag: An individual level test of the Competing Principals Theory

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Abstract
Why do members of parliament (MPs) vote against the party line? Recent explanations of party unity focus on MPs cross-pressured between the demands of competing principals such as their party and local constituencies. This article tests key claims of the Competing Principals Theory on the level of individual deputies. It relies on public statements in which MPs explain their voting behaviour. This new data source allows more direct insights into MPs' decision-making calculus than roll-call data. The article develops a theoretical model for the usage of such statements and the position MPs take vis-à-vis the party line. Empirically, it studies Explanations of Votes on all roll-call votes in the 16th German Bundestag (2005–2009) statistically controlling for sample selection. The analyses show among others things that district MPs take more critical stances, party leaders dissent less and government MPs are more likely to voice reservations without defecting in voting.

Keywords
Germany, legislative cohesion, legislators, sample selection problem, statistical analysis

Introduction
One key challenge for legislative research in parliamentary democracies is explaining why members of parliament (MPs) vote with or against their party. Various studies have explained party unity as the aggregate result of self-interested behaviour of MPs (e.g. Carey, 2007, 2009; Depauw and Martin, 2009; Kam, 2009; Saalfeld, 1995; Sieberer, 2006, 2010). The most prominent recent rational choice model of party unity – John Carey’s Competing Principals Theory (CPT) – uses a principal-agent model to explain dissenting votes based on the behaviour of MPs facing cross-pressure from more than one principal. While the theory has been quite successful in explaining cross-country and cross-party differences in unity, there have been few attempts to test its causal mechanisms on the level of individual MPs, mostly because MPs’ decision calculus cannot be studied solely based on roll-call voting behaviour.

This article studies the behaviour of cross-pressured MPs from a new angle by analysing when and how MPs themselves justify their votes in public. It relies on a parliamentary instrument called ‘Explanations of Vote’ (EoV) that allow individual MPs to explain their vote choice in the German Bundestag. EoVs and similar instruments open up new avenues for studying parliamentary voting behaviour because they contain information about MPs’ decision-making calculus beyond the binary vote choice recorded on roll calls. This information can be used to identify cross-pressured deputies and to gain insights on how they balance contradictory demands.

The article develops an explanation for the usage of EoVs and the position taken of them that is consistent with CPT. According to my theory, the decision to use EoVs is mainly based on the amount of cross-pressure an MP faces. The position taken in the EoV reflects an attempt to follow the demands of the most powerful principal in voting without alienating other principals. A number of testable
hypotheses are derived from this theory and tested on a novel dataset of EoVs on all 163 roll-call votes with a party line during the 16th Bundestag (2005–2009). A multi-level multinomial logit regression model with explicit sample selection mechanism is used to account for the hierarchical structure of the data and the fact that the position of an MP is only observable if he decides to use an EoV. The statistical results support my theory and CPT by showing among other things that government MPs are more likely to vote the party line despite reservations, that district MPs are less likely to follow the party line, and that party leaders show more loyal behaviour. Furthermore, the article provides new evidence on behavioural differences between district and list MPs in mixed electoral systems showing that the mandate type affects only the position taken in EoV, not their usage as such.

The next section reviews previous tests of CPT and outlines the specific advantages of using public statements like EoVs to test the theory on the individual level. The third section develops the theoretical model and derives testable hypotheses. These hypotheses are tested in the fifth section after discussing the data and an appropriate statistical model in section four. The article concludes by discussing implications of these findings and perspectives for future research.

Explaining individual voting behaviour in parliament

Individual level tests of the Competing Principals Theory

The Competing Principals Theory (CPT) conceptualizes MPs as self-interested agents pursuing their interests within the constraints set by their principals’ selection, monitoring and sanctioning capacities. In parliamentary democracies, political parties are the main principal because deputies depend on their party for reaching their individual goals regarding reelection, career advancement and policy influence (Müller, 1995). Accordingly, they will usually vote with the party line. However, MPs can have additional principals with competing demands. Deputies elected in single member districts or in systems with intra-party preference votes are also agents of specific electorates with potentially divergent preferences. Such MPs have incentives to cultivate a ‘personal vote’ by following demands from their personal voters instead of the party line (Cain et al., 1987; Carey, 2007; Carey and Shugart, 1995). Furthermore, some MPs have close ties to interest groups who may serve as additional principals. Finally, MPs can defy all demands from external principals and follow their personal preferences, especially if they are electorally safe or have given up the hope for future promotion (Benedetto and Hix, 2007; Kam, 2009).

CPT combines two explanatory concepts widely used in the literature on party unity: ‘Cohesion’, i.e. unified voting caused by preference homogeneity within the party, and ‘discipline’, i.e. unity induced by the party leadership through selective benefits and sanctions (e.g. Hazan, 2003; Krehbiel, 2000; Sieberer, 2006). Cohesion hinges on the ability of parties to select candidates with similar policy preferences. If cohesion is low, party leaders can induce unity by various institutional carrots (such as promotion within parliament and cabinet; e.g. Kam, 2009; Martin, 2012) and sticks (such as demotion and for cabinet parties the confidence procedure; e.g. Huber, 1996).

Even though CPT argues on the basis of individual MPs’ goals, the original tests of the theory rely on aggregated data on party unity (Carey, 2007, 2009). Thus, it remains unclear whether individual MPs are actually cross-pressured and whether these MPs defect more frequently than others. To answer these questions, additional data beyond roll-call votes are necessary that allow insights into an MP’s decision calculus.

Using different data sources, scholars have found considerable support for CPT. First, research on the European Parliament shows that (exogenously measured) preferences of both transnational party groups and national parties as competing principals affect the ideological positions of MEPs estimated on the basis of roll-call votes (Hix et al., 2009) and plenary speeches (Proksch and Slapin, 2010). Plenary speeches can also be used to identify dissenting MPs in national parliaments. However, this approach may introduce bias because speakers are often selected by party leaders based on their ideological proximity to the leadership (Proksch and Slapin, 2012). Second, research on Westminster democracies demonstrates that dissent pays off electorally while progressive career ambitions give MPs incentives to follow the party line. Thus, rational MPs are indeed torn between strategies serving competing principals (Kam, 2009). Third, MP surveys occasionally provide data on how MPs feel about party unity and how they decide when faced with competing demands from their party, their constituents and personal convictions (Andeweg and Thomassen, 2011; Patzelt, 1997).

Despite their merits, these studies can only partially test CPT on the individual level as they aggregate individual behaviour over longer periods of time to estimate MPs’ positions; cannot equally cover all MPs due to selection by party leaders; or rely on general survey answers instead of behavioural data.

Analysing the behaviour of cross-pressured MPs through Explanations of Votes

This article uses fully disaggregated behavioural data on how MPs themselves explain their voting behaviour on individual votes. If an MP justifies her behaviour and, even more, explicitly addresses the demands of more than one principal, it is very likely that she experienced cross-pressure in her voting decision. Thus, such statements allow a very direct test of CPT’s claims on how MPs behave under cross-pressure.
For the German Bundestag, Explanations of Votes (EoVs) are a particularly useful data source. EoVs are short oral or written statements allowing one or more deputies to explain their behaviour on any plenary vote (§31 Standing Orders of the Bundestag). They are published in the official minutes of the Bundestag and are often posted on MPs’ personal websites. EoVs share the potential of speech and survey data to go beyond binary vote choices but not the latter’s aggregation and selection problems because the statements refer to individual votes and are equally available to all MPs.

The usage of EoVs has increased tremendously over the past 30 years (Becher and Sieberer, 2008; Feldkamp, 2006: 17; Schindler, 1999: 1790 f.). In the 16th Bundestag (2005–2009) analysed in this article, 548 EoVs with a total of 2202 individual signatories were issued on the 177 roll-call votes alone. Nonetheless, EoVs have gained little scholarly attention. Saalfeld (1995: 181) and Beyme (1997: 274) refer to them as indicators for intra-party preference heterogeneity without further analysis. Recently, EoVs were used to test whether defector votes can be tied to district concerns (Sieberer, 2010). The only systematic study focusing directly on EoVs shows that both belonging to district concerns (Sieberer, 2010). The only systematic study focusing directly on EoVs shows that both belonging to electoral parties may be willing to accept such explanations because they cause little damage to the party (compared to voting dissent) and can help MPs release personal discontent and strengthen their electoral position vis-à-vis local principals. Third, an MP can use an EoV to justify why he votes against the party line. Such a ‘Defection’ statement is used by cross-pressured MPs who follow the demands of a competing principal or their own policy preferences. It can appease the party leadership and helps the MP claim credit from the principal he sided with in voting.

Thus, two factors are central for understanding when MPs use EoV and what position they take: First, the existence of competing principals in addition to the party increases the likelihood that deputies use EoVs. Second, the relative strength of competing principals drives the position taken in these EoVs. While MPs without cross-pressure will back the party position, dissent becomes more likely the stronger an alternative principal is. Treating the existence of competing principals and their relative strength compared to the party’s as dichotomous variables leads to the four ideal typical scenarios shown in Table 1.

<table>
<thead>
<tr>
<th>Existence of competing principals</th>
<th>Type: Loyalty</th>
<th>Type: Yes-But</th>
<th>Type: Defection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>II Usage: high Type: Loyalty</td>
<td>III Usage: high Type: Defection</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>I Usage: low Type: Loyalty</td>
<td>IV —</td>
<td></td>
</tr>
</tbody>
</table>

### Table 1. Ideal typical scenarios of cross-pressure and strength of competing principals and their consequences for the usage and type of EoVs.

**Most important principal**

<table>
<thead>
<tr>
<th>Party</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existence of competing principals</td>
<td>Yes</td>
</tr>
<tr>
<td>Type: Loyalty</td>
<td>Usage: high</td>
</tr>
<tr>
<td>Type: Yes-But</td>
<td>Usage: high</td>
</tr>
<tr>
<td>Type: Defection</td>
<td>Usage: high</td>
</tr>
</tbody>
</table>

**Usage: high**

**Type: Loyalty**

**Usage: low**

**Type: Loyalty**

**Usage: —**

### Why do MPs explain their voting behaviour and what position do they take?

**A theoretical explanation**

This section provides theoretical answers to two questions: (1) Why do MPs use EoVs, and (2) what positions do they take vis-à-vis the party line? My explanation for the use of the instrument starts from the assumption that MPs’ voting behaviour reflects the wishes of their most important principal. If deputies feel cross-pressured between the demands of multiple principals, they can use EoVs to appease principals whose wishes they cannot satisfy in voting. MPs can explain why they were unable to meet these demands, emphasize other ways in which they worked for this principal, and claim credit for their achievements. Furthermore, an EoV draws attention to the MP and her policy position thus strengthening her personal profile for re-election and career advancement.

Regarding the second question, an MP can take three positions vis-à-vis the party line: First, he can state full support for the party position. Such a ‘Loyalty’ EoV helps deputies present themselves as loyal partisans. Second, an MP can state reservations towards the party position but explain that she will nonetheless vote with the party line. This ‘Yes-But’ EoV allows MPs to address concerns of competing principals and to state their personal convictions without openly acting against the party in voting and is thus particularly attractive for cross-pressured MPs. Parliamentary parties may be willing to accept such explanations because they cause little damage to the party (compared to voting dissent) and can help MPs release personal discontent and strengthen their electoral position vis-à-vis local principals. Third, an MP can use an EoV to justify why he votes against the party line. Such a ‘Defection’ statement is used by cross-pressured MPs who follow the demands of a competing principal or their own policy preferences. It can appease the party leadership and helps the MP claim credit from the principal he sided with in voting.

Thus, two factors are central for understanding when MPs use EoV and what position they take: First, the existence of competing principals in addition to the party increases the likelihood that deputies use EoVs. Second, the relative strength of competing principals drives the position taken in these EoVs. While MPs without cross-pressure will back the party position, dissent becomes more likely the stronger an alternative principal is. Treating the existence of competing principals and their relative strength compared to the party’s as dichotomous variables leads to the four ideal typical scenarios shown in Table 1.
Two more factors are important for understanding the usage of EoVs. First, MPs can employ this instrument to advertise themselves to the party and the public. Thus, MPs who seek public attention and have few other means to get it should be more likely to use EoVs. Second, MPs should feel more need to justify their vote if their behaviour is more likely to be noticed by the public.

**Hypotheses**

This theoretical explanation leads to several empirically testable hypotheses. I discuss the usage of EoVs first before turning to the type of EoV.

First, MPs elected in single-member districts (SMD) should deviate from the party line more often than MPs elected via closed party lists in order to satisfy demands of local constituents (e.g. Carey and Shugart, 1995; Depauw and Martin, 2009; Sieberer, 2006). Mixed electoral systems like the German one are good test cases for this electoral system effect. About one half of German MPs gain their seats in SMDs, whereas the rest are elected from closed party lists on the subnational level (Saalfeld, 2005). In recent years, district MPs dissented significantly more often on roll-call votes (Sieberer, 2010; Stratmann, 2006). As district MPs are more likely to be exposed to competing demands from their party and their local constituents they have more incentives to use EoVs. This leads to the first hypothesis on EoV usage:

**H1_usage:** District MPs are more likely than list MPs to make use of EoVs.

However, the claim that district and list MPs face different incentives is highly disputed (see e.g. Manow, 2012; Sieberer, 2010). Critics argue that the large share of deputies running both in SMDs and on party lists should behave similarly irrespective of how they win their seat. To control for a potential contamination effect due to dual candidacies, I distinguish between pure list MPs and dual candidate list MPs. Successful pure list candidates totally depend on their party for re-election and thus have fewer reasons to communicate their behaviour via EoVs. Thus:

**H2_usage:** Pure list MPs are less likely than other MPs to make use of EoVs.

Third, government MPs have more incentives to use EoVs than opposition MPs, at least in systems with coalition cabinets. Members of the governing parties have to support coalition compromises which they personally and/or alternative principals dislike, and can use EoVs to voice this discontent. Furthermore, the behaviour of government MPs is more visible as the public tends to pay more attention to the behaviour and internal divisions of cabinet parties. Both arguments lead to:

**H3_usage:** Government MPs are more likely than opposition MPs to make use of EoVs.

Fourth, the position an MP holds in the hierarchy of her party and public offices influences the amount of cross-pressure she is likely to experience and the need to seek publicity via EoVs. Leaders have more influence on the party line and are thus less likely to feel cross-pressure even if they have multiple principals. Furthermore, they command many alternative means to publicize their views. Both arguments suggest:

**H4_usage:** Leaders are less likely than backbenchers to use EoVs.

Fifth, MPs should be more heavily scrutinized on motions initiated by their own party. Party leader are particularly interested in showing a united front on such motions, and outside observers like interest groups associated with their party, extra-parliamentary party organizations, and the media should also pay more attention to such motions. Given the increased visibility, MPs have more incentives to explain their behaviour on such votes. Thus:

**H5_usage:** MPs are more likely to use EoVs on motions initiated by their own party than on motions from other parties.

Beyond these systematic variables, I expect the usage of EoVs to differ between parties due to factors like internal preference homogeneity, the availability and actual usage of disciplinary instruments by the leadership, and differences in a party’s attitude towards handling internal conflicts. While I do not formulate theoretically derived hypotheses, there are prior expectations about party differences for the 16th Bundestag based on casual observations of the competitive dynamics during this period characterized by the Grand Coalition of Social Democrats (SPD) and Christian Democrats. While unpopular in both parties, the Grand Coalition was even more internally divisive for the SPD. First, Chancellor Angela Merkel succeeded in claiming many of the coalition’s achievements for her Christian Democrats. Second, the coalition’s centrist policies were very unpopular with the SPD’s left wing. Thus, I expect that discontent Social Democrats were more likely to use EoVs than Christian Democrats. I also expect more EoVs by Green MPs given the party’s traditionally open attitude towards dealing with intra-party disputes.

Finally, I expect residual MP-specific variation in the use of EoVs after controlling for the systematic variables and party differences. Such variation can result from unmeasured individual characteristics like the distance of an MP’s own policy preferences from the party line or, in the case of district MPs, specific district characteristics, and from truly personal factors like outspokenness or rebelliousness.
Let us now turn to hypotheses on the type of EoV used. As party-line voting is the standard behaviour of German MPs, I treat Loyalty EoVs as the theoretical baseline. For each explanatory variable, I formulate two hypotheses referring to the likelihood of a Yes-But and a Defection EoV, respectively, compared to the baseline. Two hypotheses each are necessary as we cannot treat the position variable as ordinal because different explanatory variables lead us to expect different orderings of the categories (see next section).

First, district MPs are more likely to side with their local constituency as a competing principal or to use their higher electoral safety (Manow, 2007) to follow their own conviction in voting. In terms of the ideal types in Table 1, district MPs are located in either Cell II or Cell III depending on how they balance the demands of competing principals. List MPs, on the other hand, either lack additional principals or, if they have one (e.g. because an MP runs as dual candidate), at least more dependent on their party. Thus:

- **H1_yesbut**: District MPs are more likely than list MPs to use EoVs of the Yes-But type.
- **H1_defect**: District MPs are more likely than list MPs to use EoVs of the Defection type.

Second, the subset of pure list MPs is most dependent on the party and thus has even fewer incentives to voice concerns or defect from the party line which leads to:

- **H2_yesbut**: Pure list MPs are less likely than other MPs to use EoVs of the Yes-But type.
- **H2_defect**: Pure list MPs are less likely than other MPs to use EoVs of the Defection type.

Third, government MPs forced to support coalition compromises experience more cross-pressure which should lead to EoVs other than Loyalty. At the same time, they have more to lose from disloyalty than opposition MPs, which gives party leaders better means to uphold unity via discipline. Government MPs are therefore located in Cell II of Table 1 and should find EoVs of the Yes-But type particularly attractive. Outright defection, on the other hand, should be less likely for government compared to opposition deputies due to the (threat of) sanctions and government MPs’ long-term self-interest in keeping the cabinet in office. These arguments lead to the following hypotheses:

- **H3_yesbut**: Government MPs are more likely than opposition MPs to use EoVs of the Yes-But type.
- **H3_defect**: Government MPs are less likely than opposition MPs to use EoVs of the Defection type.

Fourth, party leaders should voice less dissent than backbenchers. Leaders can reduce cross-pressure by actively shaping the party line and have more personal benefits to lose from disloyalty. Furthermore, one important task of party leaders is precisely to advocate and defend the party line so that they would undermine their own position by repeatedly voicing dissent. Thus:

- **H4_yesbut**: Party leaders are less likely than backbenchers to use EoVs of the Yes-But type.
- **H4_defect**: Party leaders are less likely than backbenchers to use EoVs of the Defection type.

Again, I expect party-specific differences. Based on the above-mentioned dynamics in the Grand Coalition, I expect SPD MPs to use both Yes-But type and Defection type explanations more frequently than Christian Democrats. The same is true for Green deputies exposed to a party culture of open dispute. Finally, there should be residual differences between individual deputies deriving from unobserved MP-specific factors.

### Data and methods

These hypotheses are tested using an original dataset of all EoVs on all 177 roll-call votes during the 16th Bundestag (2005–2009). The 16th Bundestag is rather unusual due to the ideologically very heterogeneous Grand Coalition cabinet that nevertheless always managed to vote in unison. These special circumstances probably increased the likelihood of observing EoVs voicing reservations or even defection because government members often faced a party line they disagreed with. As the cabinet parties enjoyed a large majority of more than 70 percent of the seats, party leaders may have granted some more leeway to discontent MPs. The question of how well the results of this article travel to other time periods is discussed in the conclusion.

The basic unit of the following analyses is the behaviour of individual MPs (usage and, if applicable, the type of EoV used) on a single roll-call vote. The dataset is confined to roll-call votes because the position of an EoV towards the party line is unknown for non-recorded votes. For the analysis, 14 free votes are removed from the dataset. I also exclude EoVs of Green deputies on a roll call without a meaningful party line. Furthermore, I do not analyse EoVs issued in the name of the entire party group; EoVs by unaffiliated MPs; EoVs without an indication of the actual voting behaviour; and EoVs that correct a false recording on a previous roll call because none of these statements give insights into how MPs position themselves towards their party. Overall, these decisions lead to a dataset with 99,611 observations of 640 different MPs on 163 roll calls.

The operationalization of most variables is straightforward. **Usage**, the first dependent variable, is a dummy coded 1 if an MdB signs an EoV on a specific vote and 0 otherwise. The second dependent variable, **EoV Type**, has the values 1; 2; and 3 for the EoV types Loyalty; Yes-But; and Defection. These variables are coded from the official minutes of the Bundestag. The first explanatory
variable, *District MP* is coded 1 if an MP gained her mandate in an SMD and 0 otherwise. *Pure List Candidate* identifies MPs gaining their seat via party lists without also running in a district race. *Government MP* is coded 1 for members of the Christian Democrats and Social Democrats, and 0 for deputies of the Liberals, Greens and the Left Party. The information on mandate type and party membership stems from official election results (Bundeswahlleiter, 2005). *Leader* identifies MPs holding one of the following offices at the time of each roll call: Chancellor, cabinet minister, junior minister, president or vice-president of the Bundestag, chair or vice-chair of a permanent committee, chair or vice-chair of a parliamentary party group (PPG), party whip or chair of a PPG working group. It is coded from the websites of the Bundestag (http://www.bundestag.de) and the PPGs. *Own Motion* is coded 1 if the motion voted on was initiated by the party of an MP based on data from the Bundestag database ‘Documentation and Information System for Parliamentary Materials’ (http://dip.bundestag.de). Cabinet motions are ascribed to both coalition partners. Finally, four separate dummy variables identify members of the Social Democrats (*SPD*), the Liberals (*FDP*), the Greens (*GR*) and the Left Party (*Left*).

Testing my hypotheses statistically poses three methodological challenges. First, the dataset contains multiple observations for each MP which are not conditionally independent because the explanatory variables do not capture the decision calculus of MPs perfectly. Instead, an MP-specific propensity to use EoVs and to take certain positions is likely to remain in the model. This clustering can be controlled for statistically by treating MPs as upper-level units in a multi-level model and introducing random intercepts at this level. These random intercepts capture both truly personal factors like being outspoken or rebellious and unmeasured systematic factors like ideological distance to the party line. The additional clustering of MPs in political parties is addressed by introducing party fixed effects via dummy variables.4

Second, the scale type of the variable *EoV Type* is debatable. Its three categories could be interpreted as ordered from no dissent (Loyalty) via mild dissent (Yes-But) to strong dissent (Defection). However, the hypotheses on government status expect a different order because the variable should increase the likelihood of observing the middle category (Yes-But) but decrease the likelihood of the top one (Defection). This contradicts the parallel regression assumption underlying statistical models for ordered variables according to which the effect of an explanatory variable is the same for all pairs of successive outcome categories. As a consequence, I use a model for unordered categorical variables that does not impose the parallel regression constraint.

Third, *EoV Type* is only observed if *Usage* has the value 1, i.e. if an MP issues an EoV. This is a classic example of a sample selection problem (Heckman, 1979) with *Usage* as the dependent variable in the selection model and *EoV Type* as dependent variable in the outcome model. Sample selection can lead to biased and inconsistent estimators if unmodelled variables affect the dependent variables in both models leading to correlated error terms. In a multi-level model, correlated random intercepts as a special type of error terms also introduce bias (Grilli and Rampichini, 2007: 387; 2010). Such a correlation is very likely in my analysis because the random intercepts are included partly to account for unmeasured MP-level explanatory variables like personal ideological distance from the party line that I expect to affect both the usage of the instrument and the type of EoV issued. While the nature of the selection bias is well understood for single-level and panel models (e.g. Wooldridge, 2010), its effects in multi-level models are largely unknown.5

I address these problems by using an econometric model introduced by Grilli and Rampichini (2007) in educational research. It consists of a multi-level logit regression for the selection model and a multi-level multinomial logit regression for the outcome model that are estimated simultaneously.6 The selection equation models the usage of EoVs based on the theoretical arguments presented above as a function of observed explanatory variables and MP-specific random intercepts. Following established practice, it contains one explanatory variable (Own Motion) that is not included in the outcome equation.7 The outcome model consists of two equations for estimating the likelihood of an MP to issue an EoV of the Yes-But type and the Defection type, respectively, on a specific roll-call vote, compared to the baseline category of Loyalty EoVs. All three equations include separate random intercepts at the MP level to capture MP-specific residual variation in the dependent variable. The random intercepts also partially relax the Independence from Irrelevant Alternatives (IIA) assumption in the multinomial logit model because IIA holds conditionally on all covariates and random intercepts (Grilli and Rampichini, 2007: 383 f.). The three equations are linked by the random intercepts that are allowed to be correlated to address the bias in the outcome equations. The model is estimated using the glamm routine in Stata 11 (Rabe-Hesketh and Skrondal, 2008).8 For all models, I use the adaptive quadrature procedure with 8 integration points.9

**Results**

Let us start with some descriptive information on the two dependent variables. MPs used EoVs on 2089 of the possible 99611 occasions (2.1 percent). Due to co-authorship, these observations refer to 490 different explanations on 72 different roll-call votes. Five hundred of the 640 MPs issued at least 1 EoV, 27 gave more than 10 such explanations, and the most articulate deputy (SPD-MP Angelika Graf) did so on 19 of 163 occasions. Thus, the usage of
EoVs is not negligible but constitutes non-standard behaviour making it even more essential to model the selection process when analysing the content of such explanations. Slightly less than half of the EoVs (1,015) are of the Yes-But type, 567 explanations fully support the party line, and 507 statements explain defection from the party line.

I estimate two model specifications. Model (1) contains only the systematic variables while model (2) also includes dummy variables to control for party effects. The Christian Democrats serve as baseline category. Model (2) excludes Government MP that would be perfectly collinear with one of the party dummies. However, the effect of government participation can be assessed from the dummies of cabinet and opposition parties. Table 2 displays the estimates for the selection equation and the two outcome equations. For the fixed part of the model, it lists the regression coefficients and standard errors. For the random part, it contains the estimated variances of the random intercepts, the Intra-class Correlation Coefficient (ICC), and the correlation between the random intercepts of the three equations.

The results demonstrate that the decision to issue an EoV and the type of EoV used are interrelated, which

### Table 2. Estimation results for multi-level multinomial logit regression models with sample selection.

<table>
<thead>
<tr>
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<th>Fixed part</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Model (1) Coefficient (SE)</td>
<td>Model (2) Coefficient (SE)</td>
</tr>
<tr>
<td><strong>Selection equation (dependent variable: Usage)</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>District MP</td>
<td>+</td>
<td>0.024 (0.094)</td>
<td>0.002 (0.081)</td>
</tr>
<tr>
<td>Pure list candidate</td>
<td>–</td>
<td>–0.673 (0.259)**</td>
<td>–0.118 (0.256)</td>
</tr>
<tr>
<td>Government MP</td>
<td>+</td>
<td>0.722 (0.121)**</td>
<td></td>
</tr>
<tr>
<td>Leader</td>
<td>–</td>
<td>–0.470 (0.084)**</td>
<td>–0.448 (0.075)**</td>
</tr>
<tr>
<td>Own motion</td>
<td>+</td>
<td>0.394 (0.049)**</td>
<td>0.401 (0.049)**</td>
</tr>
<tr>
<td>SPD [+]</td>
<td></td>
<td></td>
<td>0.501 (0.078)**</td>
</tr>
<tr>
<td>FDP</td>
<td></td>
<td>–1.287 (0.193)**</td>
<td></td>
</tr>
<tr>
<td>GR [+]</td>
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<td>0.597 (0.137)**</td>
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</tr>
<tr>
<td>Left</td>
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<td>–2.194 (0.293)**</td>
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</tr>
<tr>
<td>Constant</td>
<td></td>
<td>–4.724 (0.100)*****</td>
<td>–4.237 (0.089)*****</td>
</tr>
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<td><strong>Outcome equation: Yes-But (dependent variable: EoV Type)</strong></td>
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<td></td>
</tr>
<tr>
<td>District MP</td>
<td>+</td>
<td>0.209 (0.164)</td>
<td>0.448 (0.135)*****</td>
</tr>
<tr>
<td>Pure list candidate</td>
<td>–</td>
<td>–1.521 (0.602)**</td>
<td>–0.516 (0.496)</td>
</tr>
<tr>
<td>Government MP</td>
<td>+</td>
<td>1.203 (0.245)*****</td>
<td></td>
</tr>
<tr>
<td>Leader</td>
<td>–</td>
<td>–0.243 (0.162)</td>
<td>–0.159 (0.136)</td>
</tr>
<tr>
<td>SPD [+]</td>
<td></td>
<td></td>
<td>2.190 (0.138)*****</td>
</tr>
<tr>
<td>FDP</td>
<td></td>
<td>–0.269 (0.542)</td>
<td></td>
</tr>
<tr>
<td>GR [+]</td>
<td></td>
<td>0.634 (0.216)**</td>
<td></td>
</tr>
<tr>
<td>Left</td>
<td></td>
<td>–1.001 (1.091)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>–0.834 (0.229)*****</td>
<td>–0.781 (0.139)*****</td>
</tr>
<tr>
<td><strong>Outcome Equation: Defection (dependent variable: EoV Type)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>District MP</td>
<td>+</td>
<td>0.338 (0.182)**</td>
<td>0.506 (0.178)*****</td>
</tr>
<tr>
<td>Pure list candidate</td>
<td>–</td>
<td>–1.454 (0.574)*****</td>
<td>–0.845 (0.551)</td>
</tr>
<tr>
<td>Government MP</td>
<td>–</td>
<td>–0.153 (0.234)</td>
<td></td>
</tr>
<tr>
<td>Leader</td>
<td>–</td>
<td>–0.668 (0.181)*****</td>
<td>–0.691 (0.178)*****</td>
</tr>
<tr>
<td>SPD [+]</td>
<td></td>
<td>1.453 (0.177)*****</td>
<td></td>
</tr>
<tr>
<td>FDP</td>
<td></td>
<td>1.709 (0.428)****</td>
<td></td>
</tr>
<tr>
<td>GR [+]</td>
<td></td>
<td>1.440 (0.266)*****</td>
<td></td>
</tr>
<tr>
<td>Left</td>
<td></td>
<td>1.634 (0.655)**</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>–0.610 (0.212)*****</td>
<td>–1.526 (0.189)*****</td>
</tr>
<tr>
<td><strong>Random part</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RI Variance Selection eq. (ICC in %)</td>
<td>0.596 (15.34)</td>
<td>0.374 (10.21)</td>
<td></td>
</tr>
<tr>
<td>RI Variance Outcome Yes-But eq. (ICC in %)</td>
<td>0.907 (21.61)</td>
<td>0.054 (1.61)</td>
<td></td>
</tr>
<tr>
<td>RI Variance Outcome Defection eq. (ICC in %)</td>
<td>0.890 (21.29)</td>
<td>0.541 (14.12)</td>
<td></td>
</tr>
<tr>
<td>Corr RI Selection eq.-Yes-But eq.</td>
<td>0.651</td>
<td>0.497</td>
<td></td>
</tr>
<tr>
<td>Corr RI Selection eq.-Defection eq.</td>
<td>0.999</td>
<td>0.983</td>
<td></td>
</tr>
<tr>
<td>Corr RI Yes-But eq.-Defection eq.</td>
<td>0.678</td>
<td>0.332</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>–11771.085</td>
<td>–11543.645</td>
<td></td>
</tr>
<tr>
<td>p of LR test for unrelated models</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

*p < 0.10; **p < 0.05; ***p < 0.01%

[+] prior expectation based on casual observation, not theoretically derived hypothesis.
The estimates for the selection equation support three hypotheses: Party leaders are significantly less likely to use EoVs, and EoVs are significantly more likely on motions sponsored by an MP's own party. Furthermore, government MPs are more prone to use this instrument in model (1), where the variable is included. In contrast to my hypothesis but in line with the contamination thesis district MPs do not differ from dual candidate list MPs (the model baseline) with regard to issuing EoVs. The expected negative effect of Pure List Candidates is found in both specifications but loses significance in model (2), probably because some of it is captures by the dummy for the Left Party that contains a much higher share of pure list candidates than the other parties. The party differences in model (2) are mostly in line with expectations. Social Democrats use EoVs significantly more often than Christian Democrats, and the Greens also heavily rely on this instrument. The two other opposition parties, the Liberals and the Left, use EoVs significantly less than the two cabinet parties, which indirectly supports the hypothesis on government participation. Finally, unmeasured MP-specific factors play an important role in explaining the usage of EoVs as about 15 and 10 percent of the residual variance on the MP-level is accounted for by the random intercepts. This finding provides strong support for the choice of a multi-level model.

The outcome equations show the expected differences based on mandate type. In model (2), district MPs are significantly more likely than dual-candidate list MPs to voice concerns and to justify defection. In model (1), the coefficient is significant only for Defection type EoVs. Pure list candidates are found to use both types of dissenting EoVs less frequently, although the effect is significant only in model (1), probably due to the untypical make-up of the Left Party. As hypothesized, government MPs issue significantly more EoVs of the Yes-But type. Government status, however, does not affect the likelihood of Defection type EoVs. The very different coefficients for Government MP in the two outcome equations corroborate the decision to use a multinomial instead of an ordinal model. As expected, party leaders are less likely to take critical stances vis-à-vis the party line. However, the effect is statistically significant only for Defection type EoVs indicating that the disciplining effect of high offices works best for strong forms of dissent. As expected, members of the SPD and the Greens are more likely to voice their concerns in a Yes-But type EoV than Christian Democrats, while Liberals and members of the Left do not differ significantly from this baseline. With regard to Defection type EoVs, the coefficients for all parties are significantly positive, indicating that Defection is least likely for the Christian Democrats. While this finding provides some indirect support for the hypothesis that government MPs defect less, the high defection rate among Social Democrats shows that the effect of government participation is less clear-cut than standard theory predicts. The random intercepts capture sizeable amounts of the residual variance on the MP level. Only the ICC for the Yes-But equation drops considerably in model (2), indicating that party-level differences capture a large amount of MP-level variation.

**Conclusion**

Analysing why and how MPs justify their voting behaviour allows a straightforward individual level test of theoretical arguments on the causes of party unity. Building on John Carey’s Competing Principals Theory, this article develops and tests an explanation for why German MPs use Explanations of Votes and what position they take towards the party line. I conceptualize the use of EoVs as a strategy of MPs to strike a balance between competing demands from different principals such as their party and local constituents. Furthermore, EoVs allow MPs to build a personal profile for re-election and career advancement. I distinguish three types of EoVs: supporting the party line wholeheartedly (Loyalty), supporting it despite reservations (Yes-But) and justifying voting against the party (Defection). The type of EoV used is expected to reflect the demands of the most powerful principal while also trying to appease any competing principals. Hypotheses derived from this explanation are tested with novel data on EoVs in all roll-call votes with a party line in the 16th Bundestag (2005–2009). I use a multi-level multinomial logit regression model with explicit sample selection mechanism to statistically account for repeated decisions by individual MPs and non-random selection as the type of EoV is only observed if an MP decides to use the instrument. The empirical analysis provides strong support for most hypotheses and the methodological decisions in model selection.

Let me highlight three findings on key determinants of party unity discussed in the literature. First, the effects of the electoral system vary strongly between the usage and the EoV type models. While district and list MPs who ran as dual candidates do not differ in their usage of EoVs, district MPs are more likely to voice reservations towards the party line or to justify defection. Second, the connection between government status and the behaviour on EoVs is more complicated than expected. As hypothesized, government MPs in general use EoVs more frequently and are more likely to follow the party line despite reservations. However, they are no less prone to explain defection from the party line. Furthermore, the two cabinet parties differ sharply as SPD deputies are much more likely to use EoVs and to voice reservation or defection than their Christian
Democratic colleagues. Third, I find evidence that party leaders act more in line with their party as they use EoVs less frequently than backbenchers and issue fewer Defection type explanations. However, there is no significant difference in the likelihood of Yes-But type explanations, indicating that the disciplining force of high office is not as effective for weak forms of dissent.

Overall, the article supports key claims of the CPT on the individual level. District MPs (who are more likely to have strong competing principals) show more dissenting behaviour, party leaders (who should experience less cross-pressure) dissent less, and government MPs (who are subject to stronger discipline) more often voice reservations without ultimately defying the party whip. Furthermore, the fact that deputies frequently state reservations without defecting in voting indicates that they do experience and address competing demands regarding their voting decision. These statements as well as the findings on government status and leadership positions suggest that voting unity is not solely based on homogeneous preferences but also on discipline. While this is not a new claim, the type of data used in this article gets us one step closer to an empirical distinction between cohesion and discipline than roll-call data alone because it allows insights into the calculus underlying individual voting decisions. Finally, the article suggests a more nuanced answer to the question of whether MPs elected from single-member districts and party lists in mixed electoral systems follow distinct strategies or behave alike due to a contamination between the two tiers. District and list MPs do not differ in the usage of EoVs, indicating that they use similar strategies to create publicity and justify their actions. However, district MPs are less loyal to the party in the position they take than list MPs – supposedly to please competing principals or to follow their personal preferences capitalizing on their increased independence from their party. Thus, the behavioural effects of electoral system incentives differ across activities.

My findings open up three perspectives for future research on EoVs and similar statements. First, the analysis of this article should be extended over time to see whether the results, especially on the unexpected differences between the two cabinet parties, are caused by the special conditions of the Grand Coalition cabinet or reflect systematic variation between the party holding the chancellorship and junior coalition partners. Comparing the results in this article with earlier findings (Becher and Sieberer, 2008) leads me to expect that the effects of government status and leadership positions hold over time, while the electoral system effect may vary. Second, future analyses could study the arguments used in EoVs searching for references to competing principals and the strategies MPs use to balance between contradictory demands in their pursuit of re-election and career advancement. Finally, instruments similar to EoVs in other parliaments (for example in Belgium, The Netherlands and Italy) open up the potential for comparatively studying the determinants of individual voting behaviour and aggregate party unity in parliaments using the additional leverage provided by this new data source.

Acknowledgements

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Notes

1. A second reason is that most variables used to explain voting behaviour refer to political parties or the political system, not to individual MPs. I thank an anonymous reviewer for making this point.

2. Public statements allow insights into how deputies decide, especially if we look at broad patterns instead of focusing in depth on individual statements that might be strategic.

3. As one anonymous reviewer pointed out, MPs could also deal with cross-pressure by abstaining or skipping a vote. Whether MPs address cross-pressure head-on or try to hide may depend on personal risk attitudes. While theoretically valid, empirical data suggest that the shirking strategy is not widespread. German MPs do not systematically skip votes for substantive reasons (Saalfeld, 1995: 73–77). Abstention can be considered as a milder form of dissent, but is easily noticed by interested observers as roll-call votes are relatively rare in the Bundestag. Thus, the probabilistic argument that cross-pressure increases the likelihood of MPs to issue EoVs should hold even if EoVs may not capture all instances of cross-pressure.

4. Fixed effects are more appropriate than random effects because it is implausible to conceptualize the parties in the Bundestag as sampled from a larger population of potential parties, which would be assumed in the random effects framework (Rabe-Hesketh and Skrondal, 2008: 61 f.).

5. For linear multi-level models, a simulation study shows that both the regression coefficients and the variance components are prone to considerable bias that can go in different directions. However, it is unclear whether these results travel to models with non-linear link functions like multinomial logit (Grilli and Rampichini, 2010).

6. Formally, the model can be stated as follows (following closely the notation in Grilli and Rampichini, 2007: Equation 10): Let \( j = 1,2, \ldots, 640 \) denote MPs as upper-level units, \( i = 1,2, \ldots, 163 \) denote roll-call votes, and \( Y \) denote observed behaviour (Usage and EoV Type, respectively). Then the
selection equation (superscript S) is defined as

\[ P(Y^S_{ij} = 1|x^{S}_{ij}, \xi^S_{ij}) = \frac{\exp(\alpha^S + \beta^S x^S_{ij} + \xi^S_{ij})}{1 + \exp(\alpha^S + \beta^S x^S_{ij} + \xi^S_{ij})} \]

The set of two outcome equations (superscript O) is defined as

\[ P(Y^O_{ij} = m|x^{O}_{ij}, \xi^O_{ij}) = \begin{cases} \frac{\exp(n^{(0)}_{m} + \alpha^O_{m} x^{O}_{ij} + \xi^O_{ij})}{1 + \sum_{m=2}^{M} \exp(n^{(0)}_{m})} & \text{if } Y^O_{ij} = 1, \\ \text{not observed} & \text{if } Y^O_{ij} = 0 \end{cases} \]

where \( n^{(0)}_{m} = 0 \) for the reference category \( m = 1 \) (Loyalty) and \( n^{(0)}_{m} = \alpha^{(0)}_{m} + \beta^{(0)}_{m} x^{O}_{ij} + \xi^{(0)}_{ij} \) for the categories \( m = 2 \) (Yes-But) and \( m = 3 \) (Dissent). The vectors of the random intercepts at MP level are assumed to have the distribution \( \xi_{ij} = (\xi^{(1)}_{ij}, \xi^{(2)}_{ij}, \xi^{(3)}_{ij}) \sim N(0, \Sigma_{\xi}) \).

In contrast to Grilli and Rampichini I do not include random intercepts at the lower level (the \( \delta \) terms in their notation), i.e. the decision to use an EoV of a certain type on a specific roll-call vote. Such random intercepts would not have any straightforward interpretation as they refer to votes, not individual subjects.

7. The model is also identified without such an exclusion restriction. However, including an additional variable avoids identification based solely on the assumed functional form of the equations (Miranda and Rabe-Hesketh, 2006).

8. For estimation in gllamm, the three dependent variables are stacked in one variable. Next, three dummies are generated identifying the observations for the three equations. The independent variables for each equation are interacted with these dummies (so that only the pertinent observations are used to estimate the coefficients and variance components for the individual equations) and potentially correlated random intercepts are defined for each equation (for the general logic, see Miranda and Rabe-Hesketh (2006) and Skrondal and Rabe-Hesketh (2004: 432–438)). I thank Leonardo Grilli and Carla Rampichini for sharing the gllamm code they used in their 2007 article.

9. All models converge within less than 10 iterations. The results are similar for early iterations and for estimation with only 4 integration points. Furthermore, the condition numbers of the models are small. All these indications speak for the robustness of the findings.

10. We would have to look more closely at the arguments in EoVs to confirm that party line voting despite reservations is indeed due to discipline. While a systematic analysis is beyond the scope of this article, there is some preliminary evidence to support the claim as 50 Yes-But EoVs make explicit reference to party discipline and 139 mention coalition discipline as a reason for voting with the party line.

References


**Author biography**

Ulrich Sieberer is Research Group Leader and Fellow at the Department of Politics and Management and the Zukunftskolleg at the University of Konstanz, Germany. His research focuses on comparative parliamentary studies, party behavior, institutional design, and empirical democratic theory. His most recent research has been published in *European Journal of Political Research, West European Politics, Electoral Studies, and Government and Opposition.*