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Responsibility attribution in coalition governments: Evidence from Germany

Mariyana Angelova [a, *], Thomas König [b], Sven-Oliver Proksch [c]

[a] University of Vienna, Department of Government, Pramergasse 9, 1090 Vienna, Austria
[b] University of Mannheim, Chair of Political Science II, PO Box 103462, 68131 Mannheim, Germany
[c] McGill University, Department of Political Science, 855 Sherbrooke Street West, Montreal, Quebec H3A 2T7, Canada

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ABSTRACT

Models of coalition governance suggest that political parties pursue the interests of their electorate through the ministerial control of policy in their portfolios. Yet, little is known whether voters reward or punish coalition parties for policy performance in their portfolios. This study investigates voters' evaluations of the policy priorities of coalition parties and their responsibility attribution in twenty policy areas using survey data from Germany. Specifically, we investigate whether voters attribute policy responsibility equally across coalition parties, along the jurisdictional lines of ministerial portfolios, or to the dominant party in the coalition. Our findings suggest that party size, prime minister status, and ministerial portfolios are decisive for responsibility attribution.

1. Introduction

Electoral accountability in parliamentary democracies is contingent on the ability of voters to identify a responsible actor. There is ample evidence that electoral accountability is weaker, and even jeopardized, in democracies with institutions that blur the lines of responsibility (Powell and Whitten, 1993). Multiparty democracies represent such a setting due to the occurrence of coalition governments (Narud and Valen, 2008). When many parties govern together, which of these do voters end up holding responsible? The literature on coalition policy-making and voter perceptions of coalitions proposes different answers. In the most simple world with low levels of political sophistication (Downs, 1957) voters only have a basic understanding of coalition governance. While voters often realize that coalition governments include many parties, they may lack any further information about governmental organization and therefore do not discriminate between government parties when assessing their performance. Other scholars have emphasized the structural features of coalition governments whereby parties are interested in holding ministerial offices for policy purposes. This perspective assumes that voters do have a higher level of political sophistication and recognize the proposal power of ministerial office-holders in coalition policy decisions. In other words, voters are able to apply a ministerial autonomy-perspective and are expected to hold coalition parties responsible, but only for the policy areas under their ministerial control (Laver and Shepsle, 1992, 1996; Austen-Smith and Banks, 1990). Finally, several scholars emphasize the importance of party asymmetry and prime ministerial prerogatives for shaping final coalition policy decisions (Martin and Vanberg, 2011, 2014; Huber, 1996; Saiegh, 2009). As a result, one may expect that voters heuristically assign responsibility predominantly to the largest party holding the prime minister position in the coalition.

This study examines these propositions using survey data on voters' evaluations of the policy priorities of coalition parties in twenty policy areas in Germany, a country with a long tradition of coalition governments and strong parliamentary institutions. We uncover responsibility attribution patterns from the relationship between voters' satisfaction with the policy-specific priorities and perceived performance ratings of coalition parties and argue that the strength of this relationship reveals the magnitude of attributed responsibility. Our results reveal that coalition parties do not share equal responsibility for their coalition policy decisions. We find strong support for a large party (or prime ministerial dominance)

* Corresponding author.
E-mail addresses: mariyana.angelova@univie.ac.at (M. Angelova), koenig@uni-mannheim.de (T. König), so.proksch@mcgill.ca (S.-O. Proksch).

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conjecture. However, we find this effect only for the policy areas under the ministerial control of the largest coalition party. Perceived priorities across the policy areas managed by the junior coalition partner appear irrelevant for the performance evaluation of coalition partners, despite the fact that these policy areas are highly important to voters. These results suggest that, while both coalition partners are held responsible, the larger coalition party with the prime minister carries the largest responsibility burden, but possibly receives also the largest rewards for positive performance evaluations. Voters discount (or act as if they do so) the importance of ministerial proposal power in shaping coalition government outcomes for junior coalition partners. Overall, our findings suggest that both, party size (or prime ministerial dominance) and ministerial proposal power are essential for policy responsibility attribution.

Our study proceeds as follows. We discuss the state of the literature on responsibility attribution in coalitions, paying close attention to recent experimental work in this area. The theoretical section presents three competing perspectives of coalition governance and voters' perceptions thereof (low sophistication, ministerial autonomy, and large party dominance) from which we derive our hypotheses about expected responsibility attribution patterns. Subsequently, we present the German Internet Panel (GIP) survey data and our approach to measure voters' satisfaction with government's policy priorities across twenty policy areas at the individual level. We discuss our empirical findings and conclude the paper with final remarks.

2. Responsibility attribution in coalitions: overview

Empirical studies on electoral accountability have provided vast evidence for the strong relationship between past (economic) performance and incumbent support (Fiorina, 1981; Duch and Stevenson, 2008; Powell and Whitten, 1993; Cutler, 2004; Canes-Wrone et al., 2011; Fisher and Hobolt, 2010; Hobolt et al., 2013). At the same time, studies have shown that performance voting is weaker in complex institutional settings with blurred lines of responsibility (Anderson, 1995a, 1995b; 2000; Duch and Stevenson, 2005; Dorussen and Taylor, 2001; Hobolt et al., 2013; Lewis-Beck, 1990; Nadeau et al., 2002; Powell, 2000; Powell and Whitten, 1993; Whitten and Palmer, 1999). A frequent assumption of this literature is that voters hold coalition partners equally responsible, reflected in the common approach to consider the aggregate vote share of all government parties (see e.g. Powell and Whitten, 1993; Hobolt et al., 2013; Duch and Stevenson, 2008: 57–59; Tilley et al., 2008). Others assume that voters hold the dominant party in government responsible (Royed et al., 2000) and usually investigate the impact of (economic) policy performance on voting for the party of the chief executive or the Prime Minster (Anderson, 2000; Duch and Stevenson, 2006, 2008). The motivation for this assumption is that, besides being the largest party in government, the party of the chief executive or the Prime Minister often controls the ministry in charge of the economy or finance. However, by focusing only on one policy area, namely the economy, it is difficult to disentangle the impact of ministerial portfolios, party size and the prime minister status on voters' responsibility attribution decisions more generally.

Recent experimental studies have addressed the actual responsibility attribution patterns in the presence of coalition governments. Duch et al. (2015) use laboratory experiments to analyze how individuals assign responsibility for collective decisions in social, economic and political settings. Their study reveals that individuals predominantly rely on proposal power and/or size (vote share) as heuristics when they assign responsibility for collective decisions reached by majority rule. While there is a strong interaction effect between proposal power and size, which manifests in concentrating responsibility on the decision maker with proposal and plurality status, Duch et al. (2015) also find that proposal power and size have independent effects. In particular, actors with proposal power are also punished for collective decisions even when they are not the largest ones.[1]

The experimental results suggest that in the context of coalition governments voters should hold the coalition party with proposal power and/or with the largest seat share responsible. As proposal power within government is formally and practically granted to the party of the minister (Laver and Shepsle, 1996), voters should hold coalition parties responsible for the policy areas under their ministerial control. At the same time, given that size also matters, voters are also expected to hold the largest party responsible. While there is scarce empirical evidence which of these findings hold outside of the experimental setting, Duch and Stevenson (2013) find in a study on electoral accountability in the UK that proposal power is indeed a central aspect for responsibility attribution in economic affairs. Their analysis reveals that survey participants who value proposal power when attributing responsibility are more likely to reward and punish the coalition party in control of the economy ministry for perceived economic ups and downs. In contrast, the coalition partner without proposal power in economic policy is not held accountable for economic developments. However, because the study of Duch and Stevenson (2013) covers only the economic policy area, which is managed by the largest party in government with a prime ministerial post, it remains an open question whether ministerial proposal power, size, or prime minister prerogatives are important for responsibility attribution decisions.

Theoretically, the decisions in coalition governments need the support of each of the coalition parties to gather the required parliamentary majority and successfully pass government bills. Therefore, unless coalition governments are oversized or have the support of opposition parties in parliament, coalition parties make collective decisions unanimously. Such veto power substantially reduces the power of the proposer (Tsebelis, 2002) and even the smallest party without proposal power can block undesired policies. Furthermore, government bills are frequently amended in parliament, further limiting the ultimate influence of the proposer in government (see e.g. Martin and Vanberg, 2014). As a consequence, proposal power and size might be less important when voters assign responsibility and rate coalition parties.

Recent work has therefore highlighted the central role of policy compromise in coalition governments (Martin and Vanberg, 2011, 2014). Although coalition parties may have position taking incentives, repeated interactions between coalition partners incentivize them to reach compromises, which they try to ensure through various control and oversight mechanisms in government and parliament (Thies, 2001; Martin and Vanberg, 2011). In support of this conjecture, Martin and Vanberg (2014) find that coalition decisions indeed reflect a compromise between the coalition parties. Given that coalition governance is inconceivable without mutual policy accommodation (Martin and Vanberg, 2011), voters' perceptions of coalition policy compromises might play a significant role when they assign policy responsibility among the coalition partners. The remainder of this study explicitly focuses on collective decisions in coalitions and incorporates central aspects of

[1] In 88% of the cases when experiment participants punished only the agenda setter, the agenda setter was not the largest or the majority actor in the collective decision making body. Similarly, the largest actors were punished for collective decisions even when they did not have proposal power (Duch et al., 2015, p.377).

coalition governance derived from the literature in our theoretical discussion and empirical analysis.

3. Hypotheses

To assess responsibility attribution decisions empirically, we examine the relationship between voters' satisfaction with policy-specific priorities and their performance ratings of coalition parties. If a party is perceived as responsible for policymaking, it should be rewarded (rated higher) by voters who are satisfied with its policy priorities and punished (rated lower) by voters who are dissatisfied with the party's priorities. To assess voters' perceptions of coalition parties' policy priorities across twenty policy areas we rely on the self-reported match between an individual's and the coalition government's policy area importance. Therefore, our main explanatory variable of interest is the difference between a voter's policy priorities and the perceived government policy priorities, which we label policy priority mismatch (PPM). We seek to explain how this perceived policy priority mismatch affects the partisan performance ratings of voters and refer to this relationship in our hypotheses.

3.1. Government participation – shared responsibility

We start with a baseline expectation where voters have little incentives and are unable to directly evaluate policymaking (Downs, 1957). In such a case, we expect voters to form a very basic understanding of coalition governance. At the most basic level voters should understand that coalition governments are composed of several parties, which govern together and whose joint agreement is necessary to successfully pass policy proposals in parliament. If voters have no further knowledge and understanding of the role and powers of coalition partners, they can be expected to hold all coalition parties equally responsible irrespective of their size, prime minister status, and jurisdictional prerogatives. Our first hypothesis is therefore:

Hypothesis 1. (Government Participation: Shared Responsibility): *The performance ratings of all coalition parties decrease equally as voters are more dissatisfied with the government's priorities across all policy areas irrespective of the jurisdictional responsibilities of each coalition partner.*

3.2. Ministerial autonomy – jurisdictional responsibility

While coalition partners govern jointly, they also assign jurisdictional responsibilities amongst themselves by allocating ministerial portfolios. Drafting legislation requires policy-specific expertise, as well as detailed technical knowledge about the status quo, costs, and the implementation feasibility of alternative policies. Accordingly, policy specialization is inevitable and the actual authority to draft and ultimately propose legislation in parliamentary systems is delegated to the ministry specialized in this portfolio (Laver and Shepsle, 1994, 1996). Having this delegation process in mind, Laver and Shepsle (1996) conceptualize coalition governance and policy output in terms of ministerial discretion and autonomy. The access to policy specific expertise grants ministers considerable policy prerogatives, which they can use to shape government decisions to their own party's advantage. For example, ministers can invoke ministerial resources to obtain specialized policy knowledge necessary to draft a bill. And although the introduction of a government bill may ultimately require the approval of the whole government, the informational advantage of ministers makes it very hard for other government parties to challenge or to amend government proposals outside their ministerial jurisdiction (Laver and Shepsle, 1996). If coalition partners challenge ministerial proposals, ministers can invoke their policy expertise and argue that in the face of the various feasibility constraints no better alternative is available. Given ministerial discretion, the truthfulness of such propositions can hardly be evaluated by other ministers. Even if coalition parties are convinced that their coalition partner is using her privileged position to implement partisan interests, amending a minister's proposal may still be difficult due to the highly technical language of bills (Martin and Vanberg, 2011). Given the central role of ministerial portfolios, voters may be expected to hold coalition parties responsible for the policies their ministers stand for, i.e. along jurisdictional lines.

Compared to our first hypothesis, this perspective requires the assumption of a high level of political sophistication. Voters are assumed to understand the importance of ministerial portfolios for policy outcomes and be aware of how portfolios are distributed in government. Several studies lend support for the assumption of a high level of political sophistication by showing that voters are able to anticipate coalition bargaining and use this information to evaluate the ideological placement of coalition parties (Fortunato and Stevenson, 2013b) and to engage in coalition-directed voting (Duch et al., 2010; Kedar, 2005, 2009; Bargsted and Kedar, 2009; Blais et al., 2006; Bowler et al., 2010; Gschwend, 2007). Specifically with regard to portfolio allocation knowledge, Lin et al. (2016) find that voters can form to a large extent correct perceptions of the ministerial distribution in coalitions. They show that voters rely on several informational short cuts, such as policy ownership of parties, prime minister status and portfolio importance, to infer the division of ministerial portfolios among the coalition partners. If voters rely on their beliefs about the importance and the distribution of portfolios, they should assign responsibility along jurisdictional lines. Our second hypothesis is therefore:

Hypothesis 2. (*Ministerial Autonomy*: *Jurisdictional Responsibility*): *The performance ratings of a coalition party decrease as voters become more dissatisfied with government's priorities in the policy areas under the ministerial control of this party.*

3.3. Largest party dominance and responsibility

Critics of the ministerial autonomy perspective point out that policy decisions constitute a compromise and rarely implement the preferences of the minister's party in charge. If ministers were autonomous, the predicted policy outcomes could be pareto-inefficient in the sense that all government parties would prefer a compromise to a scenario in which each party implements its most preferred policy in the area under her own control (Thies, 2001; Martin and Vanberg, 2004). Coalition parties, thus, face strong incentives to pursue compromises. To ensure the implementation of such mutually beneficial compromises, government parties invoke various "monitoring mechanisms" in parliament and in government (Thies, 2001; Müller and Strom, 2003; Kim and Loewenberg, 2005; Martin and Vanberg, 2005, 2011; Strøm et al., 2010; Carroll and Cox, 2012). For example, in government, coalition partners shadow ministerial activity with "watchdog" junior ministers (Thies, 2001; Verzichelli, 2008; Lipsmeyer and Pierce, 2011), as well as write extensive coalition agreements (Müller and Strøm, 2008), whose public announcement invokes audience and reputation costs in case of defection. Coalition parties also install shadow committee chairs (Kim and Loewenberg, 2005; Carroll and Cox, 2012) and use committee meetings to request specific policy information, call for public hearings with policy experts and introduce amendments to ministerial draft bills.

Policy compromise, however, does not necessarily mean that coalition parties have equal influence on the final outcome. In fact, larger parties tend to have a bigger say over the final compromise negotiated in government (Martin and Vanberg, 2011, 2014), as most legislative prerogatives are allocated proportional to parliamentary party size. Party size determines the share of ministerial portfolios each coalition partner receives at the wake of government formation (Browne and Franklin, 1973; Bäck et al., 2009; Carroll and Cox, 2007; Gamson, 1961; Morelli, 1999; Warwick and Druckman, 2001, 2006), the number of available junior minister positions (Thies, 2001), and committee chairmanship in parliament (Kim and Loewenberg, 2005). All of these privileges provide large coalition parties with more proposal power, more resources to exercise ministerial control, and more bargaining power to get their proposal accepted in government and parliament. The importance of size is reflected in most empirical studies which assume that the policy adopted by the government reflects the seat-weighted average of the positions of the coalition parties (see e.g McDonald et al., 2004; Powell, 2000, 2006), an assumption which has been corroborated empirically (Martin and Vanberg, 2014).

In addition to influencing policy compromises, the largest coalition party has formateur advantages (Baron, 1991; Ansolabehere et al., 2005) and tends to hold the prime minister post, which itself comes with several important policy prerogatives. Prime ministers control ministerial appointment and the assignment of ministers' responsibilities within the department (Dewan and Hortala-Vallve, 2011; Alderman and Carter, 1992; Bäck et al., 2012). They can also influence policy making by demanding or simply having the power to call for a vote of confidence and tie the fate of the government and the parliament to their support of important policy proposals (see Huber, 1996; Saiegh, 2009).

Ideally, we would like to disentangle the effect of prime minister prerogatives from largest party dominance, but in practice the largest party tends to hold the prime ministerial position in government. Since we study voter perceptions of only one government for which this is the case, we do not further distinguish between party size or prime ministerial dominance. In either case, the perspective presupposes that voters know the relative party seat shares of coalition partners or the prime ministerial party. There is empirical evidence to suggest that a high proportion of voters in Western democracies are able to identify the party of the prime minister and have substantial knowledge about the relative size of parties (Fortunato et al., 2014). If voters focus on the dominant role of the party with the largest seat share and prime minster post, they should hold this party predominantly responsible for government's policy performance in all policy areas irrespective of its jurisdictional responsibilities. Thus, in contrast to the ministerial autonomy hypothesis, this party should also be held responsible for the policies managed by its coalition partners. Our third hypothesis is therefore:

Hypothesis 3. (*Largest/Prime Minister Party Responsibility*):

The performance ratings of the larger party (holding the prime minister post) decrease faster than the ratings of other coalition parties as voters are more dissatisfied with government's policy priorities irrespective of the jurisdictional responsibilities of the coalition parties.

4. Data

We analyze responsibility attribution patterns in the German coalition government composed of CDU/CSU and FDP (Merkel II, 2009–2013). We chose this case for several reasons. Germany has a long tradition with coalition governments, which makes it possible to test responsibility attribution decisions of citizens who are familiar with the coalition context. In addition, the German constitution explicitly specifies the formal powers and responsibilities of the individual ministers, the chancellor and the government as a whole in policy-making, making all of them central aspects of coalition governance. The German parliament is considered a relatively strong legislature: this provides government parties with various possibilities to counter tendencies of ministerial autonomy and enforce a coalition compromise (Martin and Vanberg, 2011). The coalition government under investigation has an asymmetric seat distribution, with the CDU/CSU holding more than two thirds of the seats in the government and holding the chancellorship. Our research design does not allow us to disentangle the role of party size and the chancellor post from each other and therefore we test their joint effect on responsibility attribution. If size and chancellorship matter for responsibility attribution, then we should find evidence for it in the example of the coalition government between CDU/CSU and FDP.

We rely on new data from the German Internet Panel (GIP), which collects information on political and economic attitudes and preferences through bimonthly longitudinal online panel surveys since September 2012. Although all surveys are conducted online they are based on a random probability sample of face-to-face recruited households from the German population, which were provided with access to internet and special computers if needed (Blom et al., 2015). The German Internet Panel includes $N = 1{,}603$ registered participants and is representative of both the online and offline population aged 16–75 in Germany (Blom et al., 2015). We launched a battery of policy specific survey questions in November 2012 (Blom et al., 2014b), one year prior to the federal elections in Germany in 2013. The timing of the survey was chosen to ensure that considerable time has passed since the beginning of the legislative term and voters have had enough time to observe policy making in the coalition government between CDU/CSU and FDP. We provide the English and German wording of the main survey questions used in this study in the Appendix.

One necessary condition to be able to assign policy responsibility to the coalition parties is government composition knowledge. If voters do not know who is in the government, then perceived policy performance should not matter for the evaluation of coalition parties. In a recent study, Fortunato and Stevenson (2013a) show that mistaken beliefs about government composition lead voters to hold the wrong parties accountable for economic outcomes. We find that around 80% of our survey participants know that both coalition parties, CDU/CSU and FDP participate in the government and base all subsequent analysis only on these respondents.[2]

4.1. Voters' dissatisfaction and party performance

The goal of this study is to uncover policy responsibility attribution patterns by analyzing how voters' perceptions of governmental policy priorities across a variety of policy areas affect their performance ratings of these parties. Existing studies typically focus only on the economy and capture voters' policy dissatisfaction by asking survey respondents to evaluate whether the economic situation has improved or worsened (Fiorina et al., 2003;

[2] We note that $N = 1{,}171$ panel participants took part in the particular questionnaire wave. Out of this group $N = 945$ correctly indicated that the CDU/CSU and FDP are government parties. We ran our subsequent analysis also with a full sample and included an interaction term between government composition knowledge and our policy dissatisfaction measure. As expected, we find that the overall policy priority mismatch is a strong and statistically significant predictor of government parties' ratings only when participants know that these parties are in the government.

Alvarez and Nagler, 1998; Anderson et al., 2004; Bellucci, 1985; Hobolt et al., 2013; Duch and Stevenson, 2008; Evans and Andersen, 2006; Tilley et al., 2008). Such a comparison of the previous and the current policy state comes at high information costs, as it involves a recollection of the past situation and an observation of current policy outcomes. An alternative approach is to ask voters directly how satisfied they are with the performance of the government in a given policy area. However, such question wording risks a positivity bias due to voters' general approval and predisposition towards government parties.

Our research question necessitates the coverage of a broad range of policy areas managed by all coalition partners. To avoid the informational costs of policy state evaluations, we rely on survey questions asking respondents for (i) the importance they attach to a given policy area, and (ii) the government's importance of the policy area as perceived by voters. At the most basic level voters should be able to indicate how important a given policy area is for them as well as form beliefs how important the same policy area is currently to the government. We suggest that the level of importance individuals and governments attach to a given policy area reflects the demand and perceived supply side of government's activity in this policy area. The size of the mismatch between the demand and supply side stands for the level of voters' policy dissatisfaction. Besides lower information costs, a substantial advantage of this approach is that the question about government's policy priorities does not call for a direct evaluation of government parties and thus should mitigate the partisanship bias in our final policy priority mismatch measure. This approach allows us to cover a total of twenty policy areas, managed by thirteen ministries under the control of all coalition partners in Merkel's II government (see Table 1).

We suggest that the level of importance a voter and the government attaches to a given policy area conveys not only a priority order but also the policy actions desired by voters and delivered by governments. In particular, we expect a voter who deems a policy area as important to have concrete policy demands. Similarly, we expect that a government which deems a policy area as important to pay a lot of attention and undertake concrete actions. Accordingly, a voter's perception of the importance that the government currently attaches to a given policy area should reflect how much he or she believes the government is doing in this policy area. The discrepancy between individual and perceived government policy importance should then capture how much of the voters' policy expectations the government fails to satisfy. Consider, for example, the environmental policy area and a voter who strongly associates this area with a reduction of CO2 emissions. If this voter deems the reduction of CO2 emissions as highly important, he or she also expects from the government to perform policy actions to reach this goal. If this voter, however, perceives that the government does not do much to reduce CO2 emissions or is actively involved in policymaking,which results in higher CO2 emissions, he or she will be dissatisfied and at the same time will conclude that the reduction of CO2 emissions is not important for the government. The discrepancy between desired and actual policy, and thus the level of voters' policy dissatisfaction, can be on average approximated by a discrepancy between the level of importance voters and governments (as perceived by voters) attach to a policy area. We note, however, that there might be cases when a voter perceives the government to place a high priority on a policy area, while being disappointed in the actual policies set by the government. A policy priority match would thus not necessarily capture the satisfaction of voters who tend to disagree with the government. We therefore control for possible differences for opposition and government supporters in our subsequent analyses.

We call the difference between the individual and the perceived government policy area importance the "policy priority mismatch" (PPM) and construct a PPM measure for each voter and each policy area using the absolute difference between the two. The corresponding variable for each voter and policy area ranges between 0 (no difference in importance between government and respondent) and 4 (maximum difference in importance between government and respondent). Here we assume that both situations (when a policy area is less or more

Table 1
Policy areas, Ministries and Coalition Party in Charge (Merkel II: 2009–2013).

Policy area	Ministry in charge	Party in charge
1) Civil Liberties	Justice	FDP
2) Economy	Economics and Technology	FDP
3) Energy	Economics and Technology	FDP
4) European Integration	Foreign Affairs	FDP
5) Foreign Affairs	Foreign Affairs	FDP
6) Health Care System	Health Affairs	FDP
7) Civic Participation	Interior	CDU/CSU
8) Common Currency	Finance	CDU/CSU
9) Defense	Defense	CDU/CSU
10) Education and Research	Education and Research	CDU/CSU
11) Environmental Protection	Environment, Nature Conservation & Nuclear Safety	CDU/CSU
12) Equality	Family Affairs, Senior Citizens, Women and Youth	CDU/CSU
13) Family	Family Affairs, Senior Citizens, Women and Youth	CDU/CSU
14) Immigration and Integration	Interior	CDU/CSU
15) Internal Security	Interior	CDU/CSU
16) Labour Market	Labour and Social Affairs	CDU/CSU
17) Pension System	Labour and Social Affairs	CDU/CSU
18) Public Debt	Finance	CDU/CSU
19) Tax System	Finance	CDU/CSU
20) Transport	Transport, Building and Urban Development	CDU/CSU
Not represented	Food, Agriculture and Consumer Protection	CDU/CSU

Note: This table shows the ministry and coalition party in charge for each of the twenty policy areas covered in our analyses. The only ministry from Merkel's II government not covered in our analyses is the ministry of Food, Agriculture and Consumer Protection held by the CDU/CSU.

important to the government as compared to an individual) are equally unsatisfactory. When a policy area is less important to the government, voters may be dissatisfied because their demands have not been fulfilled. When a policy area is more important to the government, voters may be dissatisfied because the government unnecessarily allocates valuable resources that are needed elsewhere.[3]

Fig. 1 shows the average importance (with standard deviations) that individuals and the government attach to each of the twenty policy areas. While every policy area is on average quite important to individuals (top left plot) and the government (top right plot), there is a clear discrepancy between the two (bottom left and bottom right plots). The top three most important areas for voters are health care, education, and energy policy. The top three areas for the government are European integration (EU), the common currency (Euro), and the economy, reflecting the German government's attention to the Euro crisis at the time. Respondents rate fifteen policy areas as less important to the government (the government does not do enough) and five policy areas as more important to the government (the government undertakes too much action). The latter group includes European integration, foreign policy, currency, defense, and economy (see bottom left plot). The largest absolute discrepancies exist in the areas of civic participation in politics, education, pension system, civil liberties, health care, and family policy. The least discrepancies exist in the areas of economy, defense, foreign policy, transport, and the common European currency (see bottom right plot).

At the individual level, all policy areas are quite important to each survey respondent. The average policy importance of the twenty policy areas for an individual ranges between 3.2 and 3.9 for the 25th to the 75th percentile of the distribution. A standard deviation of around one suggests that individuals attach different importance to each of the twenty policy areas. Only ten individuals show no variation across the policy areas. This distribution pattern implies that individuals care about a range of policy areas, but at the same time are able to differentiate between them and set clear priorities. Individuals have also clear beliefs how important these policies are to the government. However, at the individual level the average government policy importance is lower than the average individual policy importance, indicating a clear gap between individual and the government's policy priorities.

From these policy importance responses, we calculate an overall and a jurisdiction specific policy priority mismatch measures. The *overall* measure is the average of *policy priority mismatch* (PPM) for voter i over all policy areas N ($j \in N$) and is calculated as follows:

$$\mathrm{PPM}_i = \frac{\sum_{j=1}^{N} \left| \mathrm{Self}_{ij} - \mathrm{Gov}_{ij} \right|}{N}$$

The *jurisdiction specific* measure distinguishes between the ministerial responsibility of the two governing parties CDU/CSU and FDP. We first calculate the average dissatisfaction for the K areas under the jurisdiction of a minister from the CDU/CSU and then for the M areas under the jurisdiction of a minister from the FDP party.

$$\text{CDU/CSU PPM}_i = \frac{\sum_{k=1}^{K} |\mathrm{Self}_{ik} - \mathrm{Gov}_{ik}|}{K}$$

$$\text{FDP PPM}_i = \frac{\sum_{m=1}^{M} |\mathrm{Self}_{im} - \mathrm{Gov}_{im}|}{M}$$

The mapping of the policy areas to the German ministries is presented in Table 1. The larger coalition partner CDU/CSU controlled nine ministries in charge of fourteen policy areas and the smaller partner FDP managed four ministries in charge of six policy areas.

We use the reported performance ratings of each of the coalition parties, CDU/CSU and its partner FDP, as our dependent variables. For this purpose we asked the respondents of the GIP survey to indicate on an 11-point scale how satisfied they are with the performance of each of the parties.

4.2. Control variables

We control for several variables which are expected to influence government party ratings. Following Duch and Stevenson (2008) we include individual socioeconomic characteristics such as age, gender, education level, religion, satisfaction with family life, satisfaction with leisure time, and financial satisfaction.[4] We also include various political factors such as voters' partisan predisposition and perceived government and party cohesion. To capture voters' predisposition to a particular party we take their reported vote for the previous parliamentary elections in Germany held in 2009. To measure government and party cohesion we use survey questions asking participants to indicate the level of conflict within the government and the level of internal party division of each of the parties. We expect that opposition supporters rate government parties lower than government supporters and also that higher perceived government and party cohesion results in higher ratings of government parties. An overview with descriptive information of all our variables can be found in Table 2.

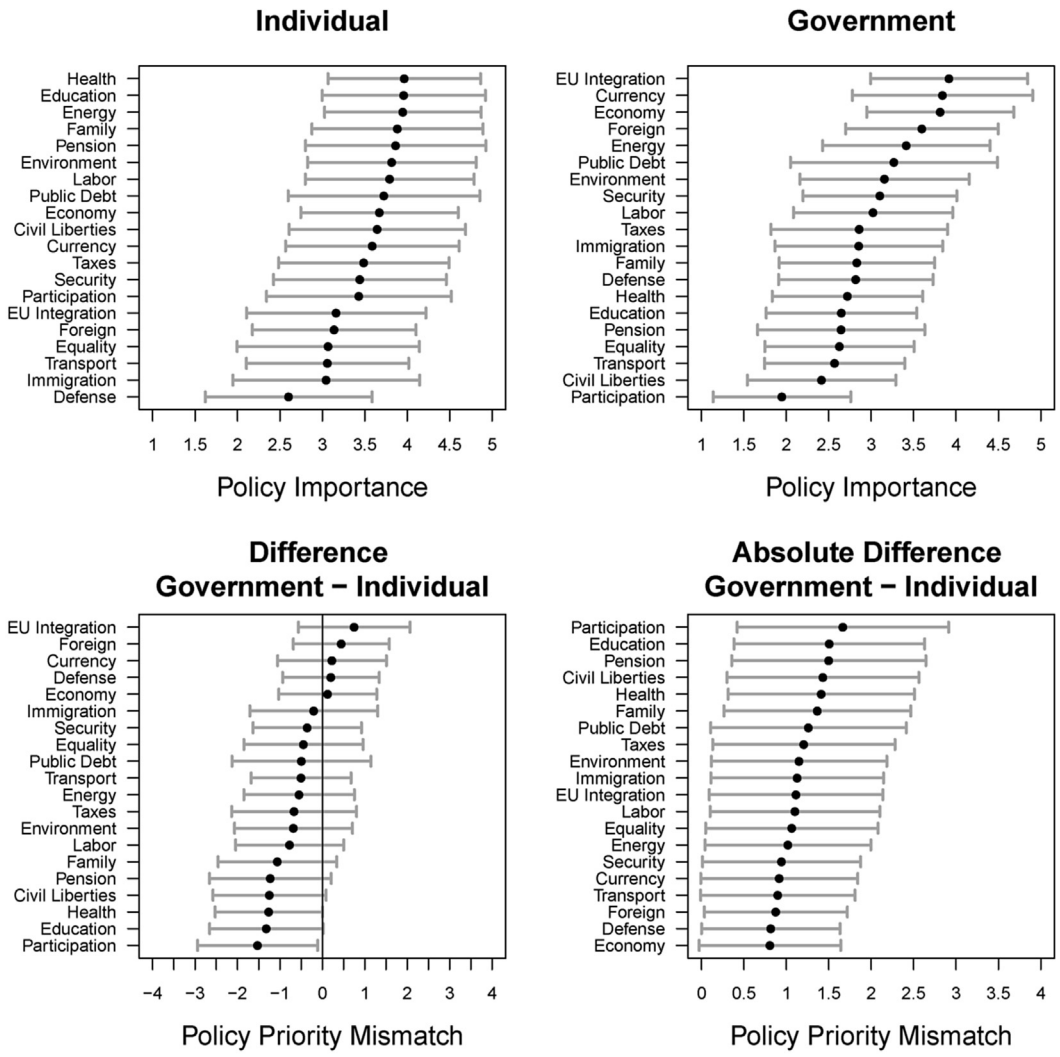
Survey respondents were given the option to choose that they do not know how important a policy area is to them or to the government. We find that 78% of the participants have indicated government and individual policy importance for *all* twenty policy areas. This suggests that the vast majority of survey respondents pay attention to all policy areas. To cover for the remaining variation we include a control variable, which counts the number of policy areas for which a survey participant did not know how important this policy area is either for her or for the government.

5. Results

To investigate responsibility attribution patterns we analyze the impact of voters' overall and jurisdiction-specific perceived policy priority mismatch on the ratings of coalition parties.

[3] To examine whether positive values of policy priority mismatch are indeed unsatisfactory to voters, we separate survey participants into groups of positive (government attaches too much importance) and negative (government attaches too little importance) values of policy priority mismatch for each of the 20 policy areas and then analyze their effect on CDU/CSU and FDP ratings. Overall, our analyses reveal, that CDU/CSU and FDP ratings decrease with higher values of policy priority mismatch, irrespective whether policy priority mismatch is negative or positive. It is rarely the case that positive policy priority mismatch increases party ratings, for CDU/CSU ratings in 5 and for FDP ratings in 8 out of 20 policy areas. However, in all of these cases the positive effect of (positive) policy priority mismatch on party ratings is highly insignificant. Overall, these results provide empirical support for our decision to treat positive and negative policy priority mismatch in a similar way and take their absolute values in our subsequent analyses. The results of these analyses are available upon request.

[4] The corresponding survey questions for these variables as well as the question on participants' vote choice in the previous elections in Germany were launched in September 2012 as part of the first wave of the German Internet Panel (Blom et al., 2014a).



Note: The top plots depict the mean values (dots) for the level of importance individuals (upper left plot) and the government (as perceived by the individuals) (upper right plot) attach to each of the listed 20 policy areas. The bottom plots show the mean values for the difference between the importance the government and an individual attaches to each of the 20 policy areas. We call this discrepancy in the policy importance values - policy priority mismatch (PPM). The bottom left plot shows the mean of the positive (policy area is more important to the government as compared to the individual) and negative (policy area is less important to the government as compared to the individual) values of PPM in each policy area. The bottom right figure shows the mean of the absolute values of PPM in each policy area. The grey intervals indicate a range of two standard deviations.

Fig. 1. Policy importance and policy priority mismatch: Policy area averages with standard deviations.

Table 3 presents the results of four linear regression models where the dependent variables are the performance ratings of the large party CDU/CSU (model 1 and 3) and the small party FDP (model 2 and 4) in Merkel's II government. The key independent variable in models 1 and 2 is the overall policy priority mismatch measure and in models 3 and 4 the jurisdiction-specific policy priority mismatch measures. We expect to see a negative coefficient implying that voters rate a coalition party lower as the policy priority mismatch increases.

Overall, the models perform quite well and are able to explain about half of the variation for the CDU/CSU ratings and about a quarter of the FDP ratings. The negative significant effects of the overall and jurisdiction specific policy priority mismatch measures on the ratings of both coalition parties constitute strong evidence that voters rate coalition parties lower when they are dissatisfied with governmental policy priorities. The signs for the coefficients of the control variables are in the expected direction. Respondents who support the FDP rate the CDU/CSU considerably lower as compared to those who support the CDU/CSU (Models 1 and 3) and vice versa (Models 2 and 4). Similarly, opposition supporters rate

Table 2
Descriptive statistics.

	Min	Median	Mean	Max	SD	Missing cases (out of 1171)
CDU/CSU Ratings	1.00	6.00	5.57	11.00	2.72	84
FDP Ratings	1.00	3.00	3.61	11.00	2.34	105
Policy Priority Mismatch – Overall (mean of absolute values)	0.00	1.10	1.16	3.83	0.53	68
Policy Priority Mismatch – CDU/CSU	0.00	1.08	1.18	4.00	0.56	68
Policy Priority Mismatch – FDP	0.00	1.00	1.11	3.75	0.59	71
Government Cohesion	1.00	4.00	4.42	11.00	1.86	98
CDU/CSU Cohesion	1.00	5.00	5.00	11.00	2.08	185
FDP Cohesion	1.00	4.00	4.11	11.00	1.97	226
N of policy areas with a don't know response	0.00	0.00	0.67	19.00	2.18	68
Age	14.00	49.00	47.60	78.00	15.21	3
Gender (dummy, 1 for woman)	0.00	0.00	0.50	1.00	0.50	0
Education	1.00	4.00	5.16	9.00	1.91	2
Family Satisfaction	0.00	8.00	7.51	10.00	2.71	7
Financial Satisfaction	0.00	6.00	5.73	10.00	2.90	5
Leisure Satisfaction	0.00	7.00	6.75	10.00	2.70	6
Religion (membership in a religious community): No: N = 770, passive: N = 213, active = 130						58
Vote choice in previous elections (2009): CDU/CSU: N = 220, FDP: N = 89, opposition parties: N = 453						409
Government Composition Knowledge (dummy)	0.00	1.00	0.82	1.00	0.39	17
Policy Priority Mismatch – Overall (mean of positive and negative values)	−2.85	−0.50	−0.52	1.75	0.64	68

Note: The table shows the minimum, maximum, median, mean, standard deviation and the number of missing cases of all variables used in our subsequent analyses. For categorical variables the table lists the total number of respondents in each category. Descriptive information is also provided for the overall policy priority mismatch (mean of positive and negative values), as well as for the government composition knowledge variables, both of which are used in additional statistical analyses that we run as controls.

the CDU/CSU and the FDP lower than their own supporters (see Models 1 to 4). We also find a positive effect of government and party cohesion, meaning that perceptions of cohesion are associated with better ratings of the parties.

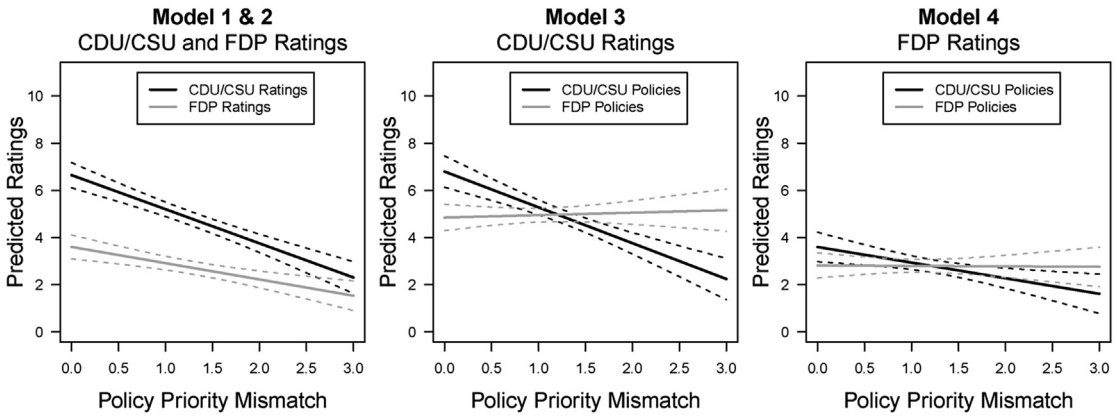
We provide a substantive interpretation for the main results in Fig. 2, where we plot the predicted values of CDU/CSU and FDP ratings for varying levels of overall and jurisdiction specific policy priority mismatch. In the left plot in Fig. 2 we find support for the largest party (prime ministerial dominance) conjecture (Hypothesis 3). The larger coalition partner CDU/CSU loses performance ratings notably faster than the FDP as voters' overall policy priority mismatch increases. This finding stays in contrast to the equal responsibility conjecture (Hypothesis 1) and thus we do not find any evidence that coalition partners are held equally responsible.

One reason for the stronger overall responsibility of the CDU/CSU might be that as the largest party in government with its party leader being the chancellor it dominates coalition decisions

Table 3
Effect of *Overall* and *Jurisdiction Specific* policy priority mismatch (PPM) on the performance ratings of CDU/CSU and FDP.

Ratings of …	Overall PPM		Jurisdiction PPM	
	Model 1 CDU/CSU	Model 2 FDP	Model 3 CDU/CSU	Model 4 FDP
(Intercept)	5.701***	2.113***	5.649***	2.103***
	(0.682)	(0.618)	(0.679)	(0.618)
PPM (Overall)	−1.448***	−0.690***		
	(0.180)	(0.166)		
CDU/CSU PPM			−1.522***	−0.664***
			(0.242)	(0.228)
FDP PPM			0.104	−0.017
			(0.226)	(0.213)
FDP Supporters vs. CDU/CSU Supporters	−0.758**	0.753***	−0.806***	0.738***
	(0.302)	(0.281)	(0.301)	(0.282)
Opposition Supporters vs. CDU/CSU Supporters	−1.896***	−0.671***	−1.897***	−0.670***
	(0.208)	(0.192)	(0.208)	(0.192)
Government Cohesion	0.229***	0.219***	0.236***	0.220***
	(0.061)	(0.052)	(0.061)	(0.052)
CDU/CSU Cohesion	0.276***		0.272***	
	(0.057)		(0.057)	
FDP Cohesion		0.241***		0.241***
		(0.049)		(0.049)
N of policies with a don't know response	0.038	0.175**	0.026	0.170**
	(0.078)	(0.081)	(0.077)	(0.081)
Socioeconomic Control Variables: Age, Gender, Education, Religion, Family Life Satisfaction, Financial Satisfaction, Leisure Time Satisfaction				
R-squared	0.472	0.283	0.477	0.284
adj. R-squared	0.458	0.264	0.463	0.264
N	571	553	571	553

Note: All estimates are from a linear regression model. The dependent variables are the ratings of CDU/CSU (Models 1 and 3) and the ratings of FDP (Models 2 and 4), as evaluated by the survey participants. We present standard errors in parentheses. The stars indicate the following p-values * = $p \leq 0.1$, ** = $p \leq 0.05$, *** = $p \leq 0.01$.



Note: The graph shows the average predicted ratings of CDU/CSU and FDP (solid lines) for different values of overall (left plot) and jurisdiction specific policy priority mismatch (PPM) (middle and right plots). The dashed lines around the solid lines represent 95 % confidence intervals based on simulations using 10,000 draws. We hold the control variables at their mean values when they are continuous and at their mode when they are categorical (unordered). The predicted values are representative for a man who is 49 years old, has graduated from high school and has some professional qualification, is not a member of a religious community, is relatively happy with his financial situation, his family life and his leisure time, and perceives the CDU/CSU, FDP and the government as relatively incohesive.

Fig. 2. Predicted CDU/CSU and FDP performance ratings for different levels of *overall* and *jurisdiction specific* policy priority mismatch.

(Hypothesis 3). An alternative explanation might be that the CDU/CSU simply deals with a larger number of policy areas in its ministries (Hypothesis 2). To shed light into this question we turn to our results on jurisdictional responsibility from models 3 and 4, depicted in Fig. 2 (middle and right plots). Our results provide partial support for both conjectures. In support of the ministerial autonomy conjecture we find that the CDU/CSU is held responsible only for its own policy areas. In support of partisan size and prime minister status conjectures we find that CDU/CSU ratings decrease more rigorously (twice as much) than the FDP ratings as voters' dissatisfaction increases. However, voters seem to take into account only CDU/CSU specific policy areas and disregard policy areas managed by the FDP when they evaluate either of the coalition parties.

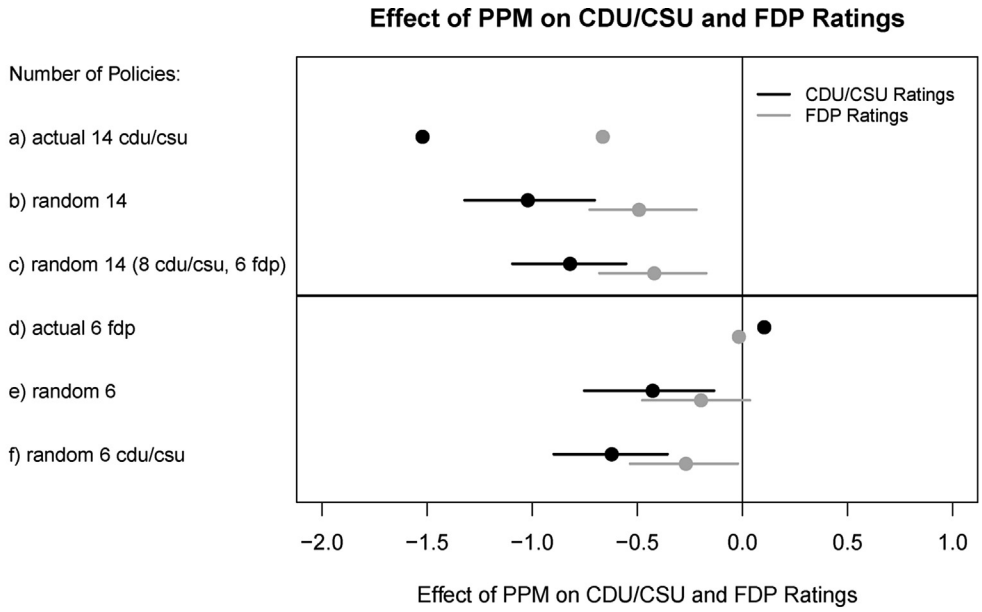
Our construction of the jurisdiction-specific policy priority mismatch (PPM) measure is based on the assumption that voters are aware of how ministerial portfolios are allocated between the coalition partners. It is plausible, however, that voters do not have such sophisticated knowledge and instead consider only the party size in cabinet when they assign responsibility to coalition partners. More importantly, such a scenario would produce similar findings.[5] In particular, if voters recognize the central role of large parties in coalition governance, but do not know, or do not care about ministerial portfolios, they would assign responsibility predominantly to the larger party in cabinet for any combination of policy areas.[6] This is in line with our finding that the CDU/CSU, which holds roughly two thirds of the ministries and the chancellory, is held predominantly responsible for all policy areas and the CDU/CSU specific policy areas. The lack of an effect of the FDP policy priority mismatch on the ratings of either party may be due to the low number of policy areas taken into account. In other words, our analysis corroborates that party size (or prime minister status) is important for responsibility attribution, but leaves two questions unanswered. First, it remains unclear whether voters know how ministerial portfolios are allocated and consider these allocations when they assign responsibility to coalition parties. Second, it is unclear whether voters deliberately disregard FDP specific policy areas when they evaluate the parties or whether the null effect of the FDP specific policy priority mismatch is due to the lower number of policy areas.

We address both questions in a robustness test involving a simulation. Specifically, we simulate a scenario in which voters randomly associate portfolios with particular parties. Thus, instead of calculating the level of voter's (dis)satisfaction with the actual 14 CDU/CSU policies and the actual 6 FDP policies, we simulate scenarios in which voters pick 14 random areas for the CDU/CSU and 6 random areas for the FDP. If responsibility attribution patterns given a random allocation of portfolios are indistinguishable from the responsibility attribution patterns given the actual allocation of portfolios, then we can conclude that voters either do not care about or do not know the correct distribution of portfolios among the coalition partners.

We start with a simulation in which we randomly divide the 20 policy areas into groups of 14 and 6 policy areas 100,000 times. In each simulation, we calculate two satisfaction scores for each respondent: one based on 14 random areas and one for the 6 remaining areas. We then rerun models 3 and 4 using the two measures from the 100,000 simulated allocations, each time recording the coefficient of the policy priority mismatch (PPM) on party performance ratings. Finally, we extract the 2.5th and 97.5th percentile of the simulated coefficients to gauge the uncertainty associated with the random allocations. Notably, we find that the coefficient of the PPM measures based on the *actual* 14 CDU/CSU

[5] We are thankful to an anonymous reviewer for this point and the suggestion for the subsequent simulation.

[6] Note that we cannot disentangle the size argument from the prime ministerial dominance argument as we study only the performance of one coalition government.



Note: The graph shows the average effect of simulated policy priority mismatch (PPM) measures on CDU/CSU ratings (black) and FDP ratings (grey). The intervals indicate the 90% lower and upper bounds of the PPM coefficients from the simulations. Scenarios are as follows (a) actual 14 policy areas managed by CDU/CSU (CDU/CSU PPM coefficients from Table 3) (b) simulations based on 14 randomly selected policy areas, (c) simulations based on 14 randomly selected policy areas from which 6 are in reality managed by FDP, (d) actual 6 policy areas managed by the FDP (FDP PPM coefficients from Table 3), (e) 6 random policy areas, and (f) 6 random policy areas in reality managed by the CDU/CSU.

Fig. 3. Simulation results: average effect of policy priority mismatch (PPM) measures based on different random allocations of policy areas on CDU/CSU and FDP performance ratings.

and *actual* 6 FDP policy areas on CDU/CSU ratings (model 3 in Table 3) lies outside of the 95% lower and upper bound of the coefficients from the simulations (see left plots in Fig. A1 in the Appendix). Substantially, the effect of the PPM measure based on 14 policy areas on CDU/CSU ratings gets considerably weaker if we assume a random allocation of portfolios by voters. The effect of the PPM measure based on 6 policy areas on FDP ratings moreover is now negative.[7] Next, we run an analysis in which we extract from the simulations only those scenarios in which all actual 6 FDP portfolios are included in the 14 simulated portfolios (meaning the remaining 8 portfolios are randomized). This is a scenario in which a voter is completely misinformed, believing the CDU/CSU manages all actual FDP portfolios. Conversely, the remaining 6 portfolios are random draws from the actual CDU/CSU portfolios, thus the voter (wrongly) believes in these simulations that the FDP manages actual CDU/CSU policies.

We present the results of our simulations in Fig. 3. The plot shows under a) the point estimates using the actual (correct) portfolio allocation for the CDU/CSU PPM measure on CDU/CSU ratings (black dot) and on the FDP ratings (grey dot) from models 3 and 4. We consider these coefficient estimates the baseline to which we compare the simulations. In the simulation scenarios we depict the average coefficient from the simulations together with the 90% lower and upper bounds of the coefficients' distribution. The plot shows under b) the average coefficient from the simulations using the completely at random portfolio allocations. Scenario c) shows the results from the simulations in which the actual 6 FDP portfolios are always wrongly assigned to the 14 CDU/CSU portfolios. In line with our previous results, the simulations reveal that party size (or prime minister status) is important for responsibility attribution. In particular, the strong negative coefficients for the CDU/CSU suggest that voters rate its performance lower at a faster rate than the FDP if they are dissatisfied (or conversely, higher if they are satisfied). No matter whether a policy priority mismatch measure is based on actual (scenario a) or random (scenarios b and c) policy areas its effect on CDU/CSU ratings is twice as strong as compared to its effect on FDP ratings. Moreover, the CDU/CSU is punished and rewarded more strongly even when only 6 random policy areas are considered (scenario e and f), although the effect differences to the FDP are much smaller.

We now evaluate the simulations with regard to our first question of whether voters consider the jurisdictional responsibility of parties in their partisan performance evaluations. To do so, we compare the point estimates from the actual to the point estimates from the random allocations in Fig. 3. If the jurisdictional responsibility of parties matters, we should find that the effect of the actual CDU/CSU PPM significantly outperforms the effect of PPM measures based on a random allocation of portfolios. Similarly, we also compare the effect of a PPM based on 6 FDP specific with 6 random policy areas on FDP ratings. We do, in fact, find evidence that the jurisdictional responsibility of coalition partners is important, suggesting that voters can form correct beliefs which policy areas are managed by the CDU/CSU. The effect of a policy priority mismatch based

[7] We depict the distribution of the effect of our random PPM measures (with 95% confidence bounds) on CDU/CSU and FDP ratings in Fig. A1 in the Appendix.

on the *actual* 14 CDU/CSU specific policy areas (scenario a) is the strongest predictor of CDU/CSU ratings among all measures and outperforms all PPM measures based on randomly assigned policy areas (scenario b, c, e, and f). When we assume that voters form their dissatisfaction with the CDU/CSU based on the 6 actual FDP policy areas and randomize only the remaining 8 portfolios (scenario c), the effect of a correct CDU/CSU PPM (scenario a) is almost twice as large.[8] This provides evidence that voters are unlikely to consider a completely random allocation of portfolios when they evaluate government parties. In any case, voters are not indifferent how portfolios are distributed among the CDU/CSU and the FDP, which is furthermore evident from the effect of PPM measures based on 6 policy areas. The effect of a PPM measure based on 6 randomly selected CDU/CSU specific policy areas (scenario f) strongly outperforms the effect of a PPM based on the actual 6 FDP specific policy areas (scenario d). We note that we do not find similar responsibility patterns for the FDP. In line with our previous findings the FDP is held responsible for CDU/CSU specific policy areas but not for its own policy areas.

We now turn to the second question of whether voters deliberately disregard FDP specific policy areas when they evaluate the coalition partners. To do so, we compare the effects of the PPM measures based on 14 and 6 policy areas on CDU/CSU and FDP ratings. If the effects of PPM measures based on 14 policy areas significantly outperform the effects of PPM measures based on 6 policy areas, then this is an indication for signal noise. We find that the effect of a PPM based on 14 policy areas is substantially stronger than the effect of a PPM based on 6 policy areas on CDU/CSU ratings (compare scenarios b and e). Similarly, although less pronounced, there are considerable differences between the effect of PPM measures based on 14 and 6 policy areas on FDP ratings. These results suggests some signal noise in the effect of PPM measures based on a lower number of policy areas.

Nevertheless, we also find evidence that voters deliberately punish the CDU/CSU and the FDP for CDU/CSU specific policy areas but not for the policy areas under the FDP's control. When we compare the effects of policy dissatisfaction taking into account only 6 policy areas, we find that the effect of the actual FDP specific policy priority mismatch is close to zero, whereas the effect of the measure based on 6 random CDU/CSU policy areas on CDU/CSU and FDP ratings is negative (compare scenarios d and f). In fact, only a priority mismatch measure based on the actual 6 FDP policy areas has no effect on FDP ratings. All other random PPM measures from the simulations have a negative effect on FDP ratings, due to the fact that CDU/CSU portfolios are now included in the ratings.

Overall, our estimation results and the findings from the simulations suggest that party size (or prime minister status) are important for responsibility attribution in coalition settings. We find that the larger coalition party, the CDU/CSU, is held more strongly responsible for dissatisfactory evaluations (and rewarded for satisfactory evaluations) than its junior partner, the FDP, across all and its own policy areas. Jurisdictional responsibility, however, also matters for responsibility attribution: voters hold the CDU/CSU responsible only across its own policy areas and assign less responsibility to the CDU/CSU when FDP policy areas are considered. The simulations reveal that voters appear to possess some knowledge of how portfolios are allocated. Together, this suggests a combined effect of party size and ministerial prerogatives on performance ratings. All of these factors are important for voters to be able to identify the dominant and thus the more responsible party in government. A smaller partner is also held responsible, although to a lesser extent. The latter finding is line with the coalition governance literature which advocates that coalition parties can influence decision-making in the policy areas under the ministerial control of their coalition partner(s) through oversight and amendments. We note, however, that the ratings for the smaller FDP were overall lower than for the CDU/CSU ratings. Another central finding is the weaker role of the policy areas managed by the junior coalition partner for partisan evaluations. While a smaller partner has proposal powers in the policy areas it manages, it lacks the bargaining power to push its policies through in government and parliament. At the same time the larger coalition partner is limited in its influence in these policy areas, as it does not have direct proposal powers. The lack of proposal powers of the larger partner and the limited bargaining power of the smaller partner appear to leave voters uncertain whom to hold responsible after all. This reasoning provides a potential explanation why, despite the relatively high importance of FDP policy areas,[9] voters disregard these policy areas when they evaluate the two government parties.

As a final robustness test, we checked whether our general results hold equally for voters who are ideologically distant and close to the government. We introduce an interaction between our jurisdiction specific policy priority mismatch measures with the previous vote choice of survey respondents. Our central findings with respect to the effect of jurisdiction specific policy priority mismatch hold also for different partisan groups (see regression results from model 5 and 6 as well as the predicted partisan ratings in Fig. A2 in the Appendix). We find that the effect of CDU/CSU PPM has a strong negative and significant effect for government and opposition party supporters, which provides empirical evidence for the presumption that our policy priority mismatch measures are able to capture policy dissatisfaction also for ideologically distant voters.

Overall, our findings suggest that voters consider the allocation of ministerial portfolios, size, and prime minister status of coalition parties when they attribute policy responsibility in coalition settings. Note that all of these factors vary in every country and every government. Accordingly, we expect to find quite different responsibility attribution patterns across and within countries with different institutional and government setups. For example, in countries with weaker prime ministers and parliaments, we expect voters to attribute responsibility more strongly among the jurisdictional lines of coalition parties. In coalition governments with more equally distributed seat shares, we expect voters to hold coalition parties more equally responsible.

6. Discussion and conclusion

Despite the overall importance of responsibility attribution for electoral accountability and the widely discussed disadvantages of blurred lines of responsibility in coalition settings, current knowledge of how voters assign responsibility for the joint governance of coalition parties is limited. We examined

[8] We also note that even if we consider estimation uncertainty from the statistical models, the effect of a correct CDU/CSU PPM on CDU/CSU ratings (scenario a) is significantly (at least at a 0.1 level) different from the point estimates of random PPM measures from scenario c.

[9] See the above average importance levels of the majority of the FDP policy areas - civil liberties, economy, energy, European integration, foreign affairs, and health in the top left plot of Fig. 1) and their relatively high levels of priority discrepancy (see the bottom right plot in Fig. 1).

responses to survey questions covering twenty policy areas and focused on responsibility attribution patterns in Germany (2009–2013). We tested three hypotheses regarding how voters assign responsibility among coalition partners: equally, along the policy areas under the ministerial control of the coalition parties, or predominantly to the larger coalition party appointing the prime minister.

Our analysis does not provide strong support for the equally shared responsibility perspective. Instead, we find that the largest coalition party, which also holds the prime minister post, is held predominantly responsible (or rewarded for setting the right priorities), but only for the policy areas under its ministerial control. Our results provide evidence that proposal power, party size, and prime minister status are decisive for responsibility attribution in coalition settings. Therefore, our analysis corroborates previous experimental findings by Duch et al. (2015) on responsibility attribution for collective decisions, with one major modification for the specific case of collective decisions in coalition governments. In such complex settings, the strongest responsibility is attributed to a government party, which controls a ministry and also has enough bargaining power to ensure the successful adoption of its proposals. We find that small coalition partners are also held responsible, but only for the policy areas managed by their larger coalition partner(s).

Our findings on responsibility attribution speak directly to the "clarity of responsibility" literature and deliver good news for democratic accountability in parliamentary democracies with a tradition of coalition governments. They imply that treating coalition parties together rather than separately, especially in coalition governments with one dominant party, may lead to misleading results and underestimate the actual electoral accountability taking place. Estimated magnitudes of electoral accountability may vary depending on which coalition parties are included in the analysis. The suggested discrepancy in electoral policy accountability among coalition parties is evident also in our case of investigation. Following the high levels of satisfaction of Merkel's II government during the 2013 federal elections in Germany, voters rewarded the CDU/CSU with a historic electoral victory and almost a single party majority government. At the same time, the FDP which faced various competence scandals did not reach the five percent electoral threshold and failed to re-enter parliament.

Funding

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Appendix A. Questions in the German Internet Panel survey (GIP)

Government policy importance

English: The government attaches different levels of importance to various policy areas. In your opinion, how much importance does *the government* currently attach to the following policy areas? Please select an answer for each policy area. (labour market, foreign policy, education and research, civic participation, energy, European integration, family, health care system, equality, internal security, civil liberties, pension system, public debt, tax system, environmental protection, transport, defense, common currency, economy, immigration and integration).

German: Die Bundesregierung misst verschiedenen Bereichen unterschiedliche Bedeutung bei. Welche Bedeutung misst *die Bundesregierung* Ihrer Ansicht nach derzeit den folgenden Bereichen bei? Bitte wählen Sie eine Antwort für jeden Bereich aus. (Arbeitsmarkt, Außenpolitik, Bildung und Forschung, Bürgerbeteiligung, Energieversorgung, Europäische Einigung, Familie, Gesundheitssystem, Gleichstellung, Innere Sicherheit, Persönlichkeitsrechte, Rentensystem, Staatsverschuldung, Steuersystem, Umwelt und Klimaschutz, Verkehr, Verteidigung, Währung, Wirtschaft, Zuwanderung und Integration).

Individual policy importance

English: And now concerning your personal opinion. How much importance do *you* attach currently to the following policy areas? Please select an answer for each policy area.

German: Und nun zu Ihrer persönlichen Meinung. Welche Bedeutung messen *Sie* derzeit den folgenden Bereichen bei? Bitte wählen *Sie* eine Antwort für jeden Bereich aus.

Partisan performance ratings

English: How satisfied or dissatisfied are you with the performance of the parties in the Bundestag (German Parliament)? Please select an answer for each party.

German: Wie unzufrieden oder zufrieden sind Sie mit den Leistungen der Parteien im Bundestag? Bitte wählen Sie eine Antwort für jede Partei aus.

Government cohesion

English: Members of the federal government sometimes express opposing views. When you recall the last four weeks, do you perceive *the federal government* as fragmented or as cohesive?

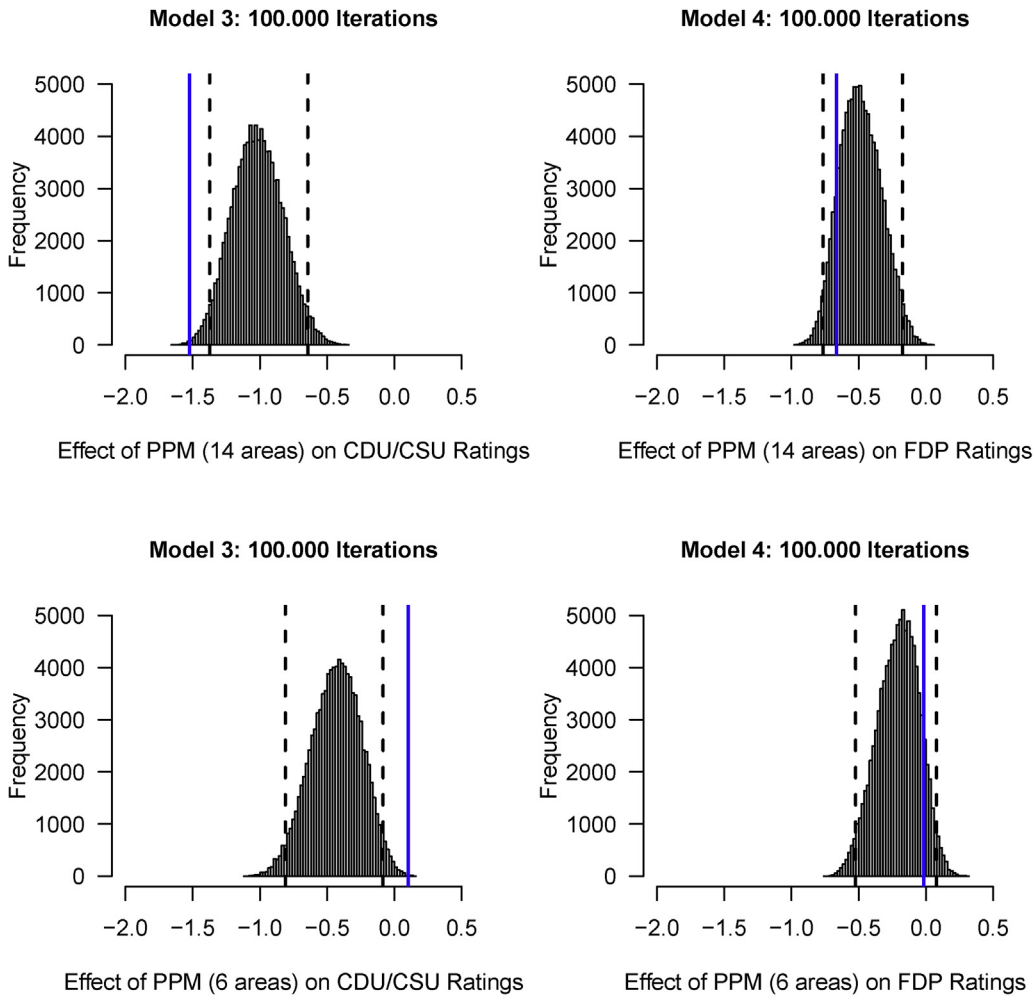
German: Innerhalb einer Bundesregierung werden manchmal verschiedene Standpunkte vertreten. Wenn Sie einmal an die letzten vier Wochen zurückdenken: Nehmen Sie die *Bundesregierung* als zerstritten oder als geschlossen wahr?

Partisan cohesion

English: Also the members of the same party sometimes express opposing views. When you recall the last four weeks, do you perceive the following party as fragmented or as cohesive? Please select an answer for each party.

German: Auch innerhalb einer Partei werden manchmal verschiedene Standpunkte vertreten. Wenn Sie einmal an die letzten vier Wochen zurückdenken: Nehmen Sie die folgenden Parteien als zerstritten oder als geschlossen wahr? Bitte wählen Sie eine Antwort für jede Partei aus:

Appendix. Supporting analyses



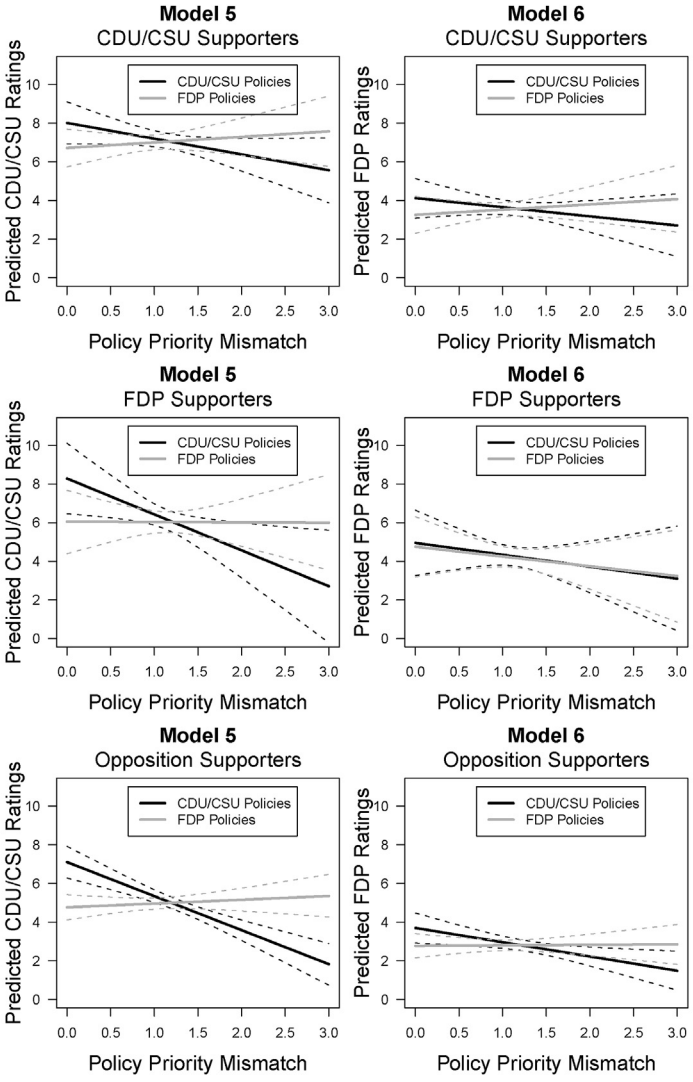
Note: The graph shows the distribution of the effect of simulated policy priority mismatch (PPM) measures on CDU/CSU ratings and FDP ratings. For this purpose we divided the 20 policy areas into groups of 14 and 6 policy areas randomly 100 000 times. We used these random groupings to recalculate our policy priority mismatch measures and rerun models 3 and 4. The left column depicts the distribution of the PPM coefficients from 100 000 iterations of model 3 and shows the effect of a policy priority mismatch measure based on a combination of random 14 (top plot) and random 6 (bottom plot) policy areas on CDU/CSU ratings. Analogically we re-estimated 100 000 times model 4 and present the results for FDP ratings in the right column. Dashed lines indicate 95 % confidence bounds. Solid lines indicate the effect of a PPM measure when all of the 14 policy areas are managed by the CDU/CSU (CDU/CSU PPM coefficients from table 3) and all of the 6 selected policy areas are managed by the FDP (FDP PPM coefficients from table 3).

Fig. A1. Distribution of the effect of policy priority mismatch measures based on randomly selected 14 and 6 policy areas on CDU/CSU and FDP performance ratings.

Table A1
Effect of *jurisdiction specific* policy priority mismatch (PPM) on the performance ratings of CDU/CSU and FDP across partisan groups.

Ratings of …	Model 5 CDU/CSU	Model 6 FDP
(Intercept)	4.682***	1.530**
	(0.784)	(0.731)
CDU/CSU PPM	−0.821*	−0.476
	(0.451)	(0.433)
FDP PPM	0.276	0.272
	(0.462)	(0.438)
FDP Supporters	0.589	1.666**
	(0.744)	(0.697)
Opposition Supporters	−0.826	−0.167
	(0.512)	(0.484)
Government Cohesion	0.250***	0.227***
	(0.062)	(0.052)
CDU/CSU Cohesion	0.260***	
	(0.057)	
FDP Cohesion		0.239***
		(0.049)
N of policies with don't knows	0.023	0.165**
	(0.077)	(0.081)
CDU/CSU PPM × FDP Supporters	−1.041	−0.139
	(0.904)	(0.851)
CDU/CSU PPM × Opp Supporters	−0.942*	−0.259
	(0.542)	(0.517)
FDP PPM × FDP Supporters	−0.297	−0.780
	(0.820)	(0.785)
FDP PPM × Opp Supporters	−0.080	−0.249
	(0.540)	(0.509)
R-squared	0.484	0.288
adj. R-squared	0.466	0.262
N	571	553

Note: All estimates are from a linear regression model. The dependent variables are the ratings of CDU/CSU (Model 5) and the ratings of FDP (Model 6), as evaluated by the survey participants. We present standard errors in parentheses. The stars indicate the following p-values * = $p \leq 0.1$, ** = $p \leq 0.05$, *** = $p \leq 0.01$.



Note: The graph shows the average predicted ratings of CDU/CSU and FDP (solid lines) for different values of jurisdiction specific policy priority mismatch (PPM) (Models 5 and 6) for CDU/CSU, FDP and opposition supporters. The dashed lines around the solid lines represent 95 % confidence intervals based on simulations using 10,000 draws. We hold the control variables at their mean values when they are continuous and at their mode when they are categorical (unordered). The predicted values are simulating a scenario for a male respondent who is 49 years old, has graduated from high school and has some professional qualification, is not a member of a religious community, is relatively happy with his financial situation, his family life and his leisure time, and perceives the CDU/CSU, FDP and the government as moderately divided.

Fig. A2. Predicted CDU/CSU and FDP performance ratings for different levels of *jurisdiction specific* policy priority mismatch across partisan groups.

Authors note

Replication materials are available on the corresponding authors' website: http://lspol2.sowi.uni-mannheim.de/english/Downloads/. Data from the German Internet Panel is available for use of the scientific community as scientific use files. Interested readers can access the data following the instructions from the homepage of the German Internet Panel: http://reforms.uni-mannheim.de/internet_panel/Data%20access/.

References

Alderman, R., Carter, N., 1992. The logistics of ministerial reshuffles. Public Adm. 70 (4), 519–534.

Alvarez, R.M., Nagler, J., 1998. Economics, entitlements, and social issues: voter choice in the 1996 presidential election. Am. J. Political Sci. 42 (4), 1349–1363.

Anderson, C., 1995a. Blaming the Government: Citizens and the Economy in Five European Democracies. M.E. Sharpe, New York.

Anderson, C.J., 1995b. The dynamics of public support for coalition governments. Comp. Polit. Stud. 28 (3), 350–383.

Anderson, C.J., 2000. Economic voting and political context: a comparative perspective. Elect. Stud. 19 (2), 151–170.

Anderson, C.J., Mendes, S.M., Tverdova, Y.V., 2004. Endogenous economic voting: evidence from the 1997 British election. Elect. Stud. 23 (4), 683–708.

Ansolabehere, S., Snyder, J.M., Strauss, A.B., Ting, M.M., 2005. Voting weights and formateur advantages in the formation of coalition governments. Am. J. Political Sci. 49 (3), 550–563.

Austen-Smith, D., Banks, J., 1990. Stable governments and the allocation of policy portfolios. Am. Political Sci. Rev. 84 (3), 891–906.

Bäck, H., Meier, H.E., Persson, T., 2009. Party size and portfolio payoffs: the proportional allocation of ministerial posts in coalition governments. J. Legislative Stud. 15 (1), 10–34.

Bäck, H., Meier, H.E., Persson, T., Fischer, J., 2012. European integration and prime ministerial power: a differential impact on cabinet reshuffles in Germany and Sweden. Ger. Polit. 21 (2), 184–208.

Bargsted, M.A., Kedar, O., 2009. Coalition-targeted Duvergerian voting: how expectations affect voter choice under proportional representation. Am. J. Political Sci. 53 (2), 307–323.

Baron, D.P., 1991. A spatial bargaining theory of government formation in parliamentary systems. Am. Political Sci. Rev. 85 (1), 137–164.

Bellucci, P., 1985. Economic concerns in Italian electoral behavior: toward a rational electorate. In: Eulau, H., Lewis-Beck, M.S. (Eds.), Economic Conditions and Electoral Outcomes: the United States and Western Europe. Agathon Press, New York, pp. 98–110.

Blais, A., Aldrich, J.H., Indridason, I.H., Levine, R., 2006. Do voters vote for government coalitions? Testing Downs' pessimistic conclusion. Party Polit. 12 (6), 691–705.

Blom, A.G., Bossert, D., Funke, F., Gebhard, F., Holthausen, A., Krieger, U., 2014a. German Internet Panel, Welle 1-Core Study (September 2012) (ZA5866 Datenfile, Version 1.0.0. Universität Mannheim. http://dx.doi.org/10.4232/1.12107. GESIS Datenarchiv Köln: SFB 884 "Political Economy of Reforms".

Blom, A.G., Bossert, D., Funke, F., Gebhard, F., Holthausen, A., Krieger, U., 2014b. German Internet Panel, Welle 2 (November 2012) (ZA5867 Datenfile Version 1.0.0. Universität Mannheim. http://dx.doi.org/10.4232/1.12108. GESIS Datenarchiv Köln: SFB 884 "Political Economy of Reforms".

Blom, A.G., Gathmann, C., Krieger, U., 2015. Setting up an online panel representative of the general population: the German Internet Panel. Field Methods 27 (4), 1–18.

Bowler, S., Karp, J.A., Donovan, T., 2010. Strategic coalition voting: evidence from New Zealand. Elect. Stud. 29 (3), 350–357.

Browne, E.C., Franklin, M.N., 1973. Aspects of coalition payoffs in European parliamentary democracies. Am. Political Sci. Rev. 67 (2), 453–469.

Canes-Wrone, B., Minozzi, W., Reveley, J.B., 2011. Issue accountability and the mass public. Legis. Stud. Q. 36 (1), 5–35.

Carroll, R., Cox, G.W., 2007. The logic of Gamson's law: pre-election coalitions and portfolio allocations. Am. J. Political Sci. 51 (2), 300–313.

Carroll, R., Cox, G.W., 2012. Shadowing ministers monitoring partners in coalition governments. Comp. Polit. Stud. 45 (2), 220–236.

Cutler, F., 2004. Government responsibility and electoral accountability in federations. Publius J. Fed. 34 (2), 19–38.

Dewan, T., Hortala-Vallve, R., 2011. The three As of government formation: appointment, allocation, and assignment. Am. J. Political Sci. 55 (3), 610–627.

Dorussen, H., Taylor, M., 2001. The political context of issue-priority voting: coalitions and economic voting in the Netherlands, 1970–1999. Elect. Stud. 20 (3), 399–426.

Downs, A., 1957. An economic theory of political action in a democracy. J. Political Econ. 65 (2), 135–150.

Duch, R., Stevenson, R., 2013. Voter perceptions of agenda power and attribution of responsibility for economic performance. Elect. Stud. 32 (3), 512–516.

Duch, R.M., May, J., Armstrong, D.A., 2010. Coalition-directed voting in multiparty democracies. Am. Political Sci. Rev. 104 (4), 698–719.

Duch, R.M., Przepiorka, W., Stevenson, R., 2015. Responsibility attribution for collective decision makers. Am. J. Political Sci. 59 (2), 372–389.

Duch, R.M., Stevenson, R., 2005. Context and the economic vote: a multilevel analysis. Polit. Anal. 13 (4), 387–409.

Duch, R.M., Stevenson, R., 2006. Assessing the magnitude of the economic vote over time and across nations. Elect. Stud. 25 (3), 528–547.

Duch, R.M., Stevenson, R.T., 2008. The Economic Vote: How Political and Economic Institutions Condition Election Results. Cambridge University Press, Cambridge.

Evans, G., Andersen, R., 2006. The political conditioning of economic perceptions. J. Polit. 68 (1), 194–207.

Fiorina, M., Abrams, S., Pope, J., 2003. The 2000 US presidential election: can retrospective voting be saved? Br. J. Political Sci. 33 (2), 163–187.

Fiorina, M.P., 1981. Retrospective Voting in American National Elections, Volume 5. Yale University Press, New Haven.

Fisher, S.D., Hobolt, S.B., 2010. Coalition government and electoral accountability. Elect. Stud. 29 (3), 358–369.

Fortunato, D., Lin, N., Stevenson, R.T., 2014. Political Knowledge in Coalition Democracies. Rice University Manuscript.

Fortunato, D., Stevenson, R.T., 2013a. Performance voting and knowledge of cabinet composition. Elect. Stud. 32 (2), 517–523.

Fortunato, D., Stevenson, R.T., 2013b. Perceptions of partisan ideologies: the effect of coalition participation. Am. J. Political Sci. 57 (2), 459–477.

Gamson, W.A., 1961. A theory of coalition formation. Am. Sociol. Rev. 26 (3), 373–382.

Gschwend, T., 2007. Ticket-splitting and strategic voting under mixed electoral rules: evidence from Germany. Eur. J. Political Res. 46 (1), 1–23.

Hobolt, S., Tilley, J., Banducci, S., 2013. Clarity of responsibility: how government cohesion conditions performance voting. Eur. J. Political Res. 52 (2), 164–187.

Huber, J.D., 1996. The vote of confidence in parliamentary democracies. Am. Political Sci. Rev. 90 (02), 269–282.

Kedar, O., 2005. When moderate voters prefer extreme parties: policy balancingin parliamentary elections. Am. Political Sci. Rev. 99 (2), 185–199.

Kedar, O., 2009. Voting for Policy, Not Parties: How Voters Compensate for Power Sharing. Cambridge University Press, New York.

Kim, D.-H., Loewenberg, G., 2005. The role of parliamentary committees in coalition governments keeping tabs on coalition partners in the German Bundestag. Comp. Polit. Stud. 38 (9), 1104–1129.

Laver, M., Shepsle, K.A., 1992. Election results and coalition possibilities in Ireland. Ir. Polit. Stud. 7 (1), 57–72.

Laver, M., Shepsle, K.A., 1994. Cabinet Ministers and Parliamentary Government. Cambridge University Press, Cambridge.

Laver, M., Shepsle, K.A., 1996. Making and Breaking Governments: Cabinets and Legislatures in Parliamentary Democracies. Cambridge University Press, Cambridge.

Lewis-Beck, M.S., 1990. Economics and Elections: the Major Western Democracies. University of Michigan Press, Ann Arbor.

Lin, N., Stevenson, R.T., Tromborg, M.W., Fortunato, D., 2016. Gamson's law and voter's perceptions of portfolio allocation. Rice Univ. Manuscr.

Lipsmeyer, C.S., Pierce, H.N., 2011. The eyes that bind: junior ministers as oversight mechanisms in coalition governments. J. Polit. 73 (4), 1152–1164.

Martin, L.W., Vanberg, G., 2004. Policing the bargain: coalition government and parliamentary scrutiny. Am. J. Political Sci. 48 (1), 13–27.

Martin, L.W., Vanberg, G., 2005. Coalition policymaking and legislative review. Am. Political Sci. Rev. 99 (1), 93–106.

Martin, L.W., Vanberg, G., 2011. Parliaments and Coalitions: the Role of Legislative Institutions in Multiparty Governance. Oxford University Press, Oxford.

Martin, L.W., Vanberg, G., 2014. Parties and policymaking in multiparty governments: the legislative median, ministerial autonomy, and the coalition compromise. Am. J. Political Sci. 58 (4), 979–996.

McDonald, M.D., Mendes, S.M., Budge, I., 2004. What are elections for? Conferring the median mandate. Br. J. Political Sci. 34 (1), 1–26.

Morelli, M., 1999. Demand competition and policy compromise in legislative bargaining. Am. Political Sci. Rev. 93 (4), 809–820.

Müller, W.C., Strom, K., 2003. Coalition Governments in Western Europe. Oxford University Press, Oxford.

Müller, W.C., Strøm, K., 2008. Coalition agreements and cabinet governance. In: Strøm, K., Mueller, W.C., Bergman, T. (Eds.), Cabinets and Coalition Bargaining: the Democratic Life Cycle in Western Europe. Oxford University Press, Oxford, pp. 159–199.

Nadeau, R., Niemi, R.G., Yoshinaka, A., 2002. A cross-national analysis of economic voting: taking account of the political context across time and nations. Elect. Stud. 21 (3), 403–423.

Narud, H., Valen, H., 2008. Coalition membership and electoral performance. In: Strøm, K., Müller, W.C., Bergman, T. (Eds.), Cabinets and Coalition Bargaining: the Democratic Life Cycle in Western Europe. Oxford University Press, Oxford, pp. 369–402.

Powell, G.B., 2000. Elections as Instruments of Democracy: Majoritarian and Proportional Visions. Yale University Press, New Haven.

Powell, G.B., 2006. Election laws and representative governments: beyond votes and seats. Br. J. Political Sci. 36 (2), 291–315.

Powell, G.B., Whitten, G.D., 1993. A cross-national analysis of economic voting: taking account of the political context. Am. J. Political Sci. 37 (2), 391–414.

Royed, T.J., Leyden, K.M., Borrelli, S.A., 2000. Is 'clarity of responsibility'important for economic voting? Revisiting Powell and Whitten's hypothesis. Br. J. Political Sci. 30 (4), 669–698.

Saiegh, S.M., 2009. Political prowess or "Lady Luck"? Evaluating chief executives legislative success rates. J. Polit. 71 (04), 1342–1356.
Strøm, K., Müller, W.C., Smith, D.M., 2010. Parliamentary control of coalition governments. Annu. Rev. Political Sci. 13, 517–535.
Thies, M.F., 2001. Keeping tabs on partners: the logic of delegation in coalition governments. Am. J. Political Sci. 45 (3), 580–598.
Tilley, J., Garry, J., Bold, T., 2008. Perceptions and reality: economic voting at the 2004 European parliament elections. Eur. J. Political Res. 47 (5), 665–686.
Tsebelis, G., 2002. Veto Players: How Political Institutions Work. Princeton University Press, Princeton.
Verzichelli, L., 2008. Portfolio allocation. In: Strøm, K., Müller, W.C., Bergmann, T. (Eds.), Cabinets and Coalition Bargaining: the Democratic Life Cycle in Western Europe. Oxford University Press, Oxford, pp. 237–269.
Warwick, P.V., Druckman, J.N., 2001. Portfolio salience and the proportionality of payoffs in coalition governments. Br. J. Political Sci. 31 (4), 627–649.
Warwick, P.V., Druckman, J.N., 2006. The portfolio allocation paradox: an investigation into the nature of a very strong but puzzling relationship. Eur. J. Political Res. 45 (4), 635–665.
Whitten, G.D., Palmer, H.D., 1999. Cross-national analyses of economic voting. Elect. Stud. 18 (1), 49–67.