

Coalition Policy Perceptions

Shaun Bowler^{*1}, Thomas Gschwend^{†2}, and Indridi H. Indridason^{‡1}

¹University of California, Riverside

²University of Mannheim

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Abstract

A recent literature on coalitional voting assumes that voters' expectations about the coalition policy influences vote choice. Yet little is known about whether, or how, voters actually form expectations about government policy. We examine whether voters evaluate coalitions in the manner that research on government policy has suggested. In particular, we examine whether voters take account of the coalition parties' sizes, bargaining strength, and leader evaluations in forming their expectations. Our findings indicate that each of these factors does influence voters' evaluations but that there is not clear evidence of voters using simple heuristics, i.e., equal or proportional influence (as Gamson's Law suggests), in forming their expectations.

Parliamentary systems are often seen as coming in two varieties. The first, typically associate with Westminster, is characterized by single party majority governments. In the other variety party leaders, on the other hand, must cobble together a legislative majority by forming government coalitions. Each type is generally thought have certain advantages over the other. Multiparty parliamentary systems should be more representative — voters have a greater

*shaun.bowler@ucr.edu

†gschwend@uni-mannheim.de

‡indridi.indridason@ucr.edu

variety of parties to choose from and should, therefore, have higher degree of ideological congruence. Westminster systems, on the other hand, offer voters few choices but make it easy for voter to hold the government accountable. With a single party in the executive office, a government party can not easily escape responsibility for poor performance or its actions in office. In contrast, coalition government parties are more difficult to hold to account. Coalition parties will seek to claim credit for successful policies and favorable policy outcomes while blaming their partners when things go wrong. As a consequence voters have a difficult time assigning responsibility, which consequently reduces politicians' incentives to act responsibly.

While coalition parties may seek to claim credit and assign blame, this does not necessarily imply that voters have no means by which to evaluate the performance of individual parties in government. Assuming that the coalition parties hold distinct ideological positions voters could reasonably expect that the government's policy decisions will be a compromise between the parties, i.e., that the policy ought to lie somewhere in between the parties' preferred policies and, moreover, that a coalition party has been more influential the closer to a party's preferred policy the policy outcomes is. As the incentives to assign blame and claim credit ought to be clear to voters, they are always free to simply disregard the parties' rhetoric as cheap talk and evaluate them solely on the basis of the observed policy outcome and how closely they resemble the parties' actual policy platforms, e.g., as conveyed in the parties' manifestos or during electoral campaigns. This, of course, is not to say that government policies can not differ on other dimensions such as quality, e.g., in terms of efficiency or fairness, but it is at least one benchmark that voters can, and, perhaps, should, use in evaluating the performance of individual government coalition parties.

Whether voters do form such expectations about government parties is an open question. While the literature frequently assumes that voters have expectations about how individual parties affect policy outcomes, there have been no systematic analysis of whether that is the case and whether voters' expectations respond to the factors that generally are thought to influence coalition policy.

The idea that the size of the coalition parties influences coalition policy is fairly widespread (see, e.g., Laver and Budge, 1992; Kedar, 2005; Bargsted and Kedar, 2009; Indridason, 2011; Duch et al., 2010; Powell, 2000; Huber and Powell, 1994) where each parties' influence is usually assumed to be proportional to their seat share. This assumption is also widely used in

empirical work.¹ The Comparative Manifesto Project, e.g., reports government policy positions in its dataset where coalition policies are calculated on the basis of party policy positions as estimated from the party manifestos with the influence of each party being proportional to the coalition parties' share of seats in the legislature. [Kim and Fording \(2002\)](#) employ a similar approach but weigh the coalition parties' policy positions by the number of seats in the cabinet.

Overall, this literature makes strong assumptions about how the policy preferences of coalition parties affect government policy and a subset of this literature that focus on how government policy factors into voters' decision. Implicitly this literature then assumes that voters believe that those assumptions are true. Yet we do not know whether voters really hold such beliefs. In this paper we examine how voters evaluate the influence of individual coalition parties on government policy and evaluate whether they resemble the assumptions that often are made in the literature.

Government Policy

The reader may have noted that in the introduction we emphasized assumptions about government policy rather than theories of how coalition policy is made. The reason is fairly simple; our understanding of how government policy is made in parliamentary systems remains rather rudimentary although many scholars have taken important steps towards rectifying this situation. Important contributions have been made in the study of how coalition governments address problems of moral hazard and implementation. [Thies \(2001\)](#) and [Lipsmeyer and Pierce \(2011\)](#) show how junior ministers can be used to shadow ministers with an eye towards limiting policy drift and [Kim and Loewenberg \(2005\)](#) and [Carroll and Cox \(2012\)](#) show that chairs of parliamentary committees appear to be chosen with similar goals in mind. [Martin and Vanberg \(2011\)](#) similarly argue that parliamentary committees are used to police the coalition bargain. Most of these contributions, however, presupposes that there is a coalition bargain that requires enforcing — they are less informative when it comes explaining what the coalition bargain consists of.

Explaining the policy of a coalition government and how much influence

¹Others, e.g., [De Sinopoli and Iannantuoni \(2008\)](#) have assumed that policy outcomes equal the seat or vote share weighted average of *all* the political parties' policy positions, which amounts to cabinet membership having no value in terms of policy.

individual coalition parties is more challenging — in part because measuring government policy is difficult. Well established methods of measuring party policy, e.g., on the basis of their manifestos or using expert surveys exist but comparable methods do not exist or have not been employed for government policy. In the case of government policy, one option is to focus on coalition agreements, speeches from the throne, or similar texts but it is not clear whether those can be taken as true statements of government policy. That is, they may serve other purposes, e.g., governments may use them to cast themselves in a favorable light by emphasizing popular issues while deemphasizing, or not mentioning at all, more controversial issues. While a similar concern can be raised about party manifestos, party manifestos at least appear in generally to serve two particular purposes, i.e., to state the fundamental values of the party and to serve as blueprint for the party's electoral campaign.

Because government policy is difficult to measure, scholars have tended to focus on observable outcomes that are easily quantifiable.² This is one reason the division of cabinet portfolios has attracted considerable attention. The division of government portfolios can be seen as an indicator of how the spoils of office are divided but as, e.g., [Laver and Shepsle \(1996\)](#) argue, the control of a cabinet portfolio can imply significant influence over the direction of policy within the portfolio. Thus, and especially in systems where ministers enjoy a high degree of autonomy, it is reasonable to think that the division of cabinet portfolios reflects the influence of individual coalition parties on government policy.³ This idea seems, e.g., to motivate [Kim and Fording's \(2002\)](#) measure of government policy. Interestingly, the division of cabinet portfolios is simultaneously one of the political phenomena that we are best able to predict and least able to explain. [Gamson \(1961\)](#) showed that the number of cabinet portfolios a party receives is proportional to the party's legislative seat share among the government parties. A number of studies have

²Theoretically, one could analyze government legislation — as well as existing legislation that has not been altered — in order to estimate government policy but in practice that is an exceedingly complicated task.

³It is, of course, possible that the allocation of portfolios has little to do with policy, e.g., if ministers enjoy little autonomy and the parties see government formation consisting of two separate bargaining problems — one over the division of office benefits and one over policy. Moreover, there may be a trade-off between the two if that is the case — some parties might be willing to give up office benefits for policy concessions. In that case, the relationship between control of portfolio and policy influence could be negative.

replicated Gamson's (1961) finding and although the relationship between legislative and cabinet seats is not perfectly proportional there is, indeed, a remarkable strong relationship between the two that accounts for most of the variance in the data.⁴ Given the degree of proportionality and, alternatively, the notion of fairness sometimes attached to proportional allocation, it seems reasonable to think that voters might expect coalition parties to exert influence on government policy proportional to their legislative seat strength.

Conjecture 1 *Gamson's Law.* *Respondents expect government policy to be the seat share weighted average of the coalition parties' policy positions.*

While thinking about policy making in coalition governments along the lines of Gamson's Law does not require a deep understanding of coalition policy making it is also possible that voters rely on a simpler heuristic in forming expectations about government policy outcomes; that parties that govern together have equal influence on policy.

Conjecture 2 *Equal Division.* *Respondents expect government policy to be the (unweighted) average of the coalition parties' policy positions.*

Bargaining theories of coalition formation tend to offer very different predictions about the balance of power within coalition governments. In particular, most bargaining models suggest that the formateur should reap a disproportionately large share of the spoils of office (Baron and Ferejohn, 1989). Overall, we should then expect larger parties, on average, to have a bigger impact on policy outcomes as leaders of larger parties are more likely to be appointed formateurs (Diermeier and Merlo, 2004).

Conjecture 3 *Bargaining Theory.* *Respondents expect the formateur party to have a disproportionate impact on the coalition's policy.*

Morelli's (1999) demand bargaining model, which relaxes the assumption that only one offer can be on the table at any given time, shows that outcomes resembling Gamson's Law can occur. A limitation of the early literature on legislative and coalition bargaining was that it focused on the division of fixed pie, e.g., cabinet portfolios. As we argued above, these results are still

⁴See, e.g., Druckman and Warwick (2005); Warwick and Druckman (2006); Bäck et al. (2009); Indridason (2013).

interesting as there may be reasons to believe that control over portfolios has policy consequences but bargaining over policy is likely to be governed by different dynamics. Morelli's (1999) model does consider bargaining over office and policy benefits and Gamson's Law-like results occur as long as the parties' preferences over policy are not too strong. However, if the parties care enough about policy then the policy outcomes is the median party's policy. Baron and Diermeier (2001) similarly model bargaining over offices and votes in the alternating offers framework and in their model the policy outcome is generally the midpoint between the coalition parties' policy positions.

It is also possible that factors outside of the bargaining context, i.e., the distribution of party vote shares, and the coalition formation procedures influence how voters evaluate coalitions. In particular, voters may be influenced by the personal characteristics of the party leaders who represent the parties in the coalition negotiations and lead their parties in government. That voters's expectations are influenced by party leaders seem plausible as many have argued that parliamentary politics have increasingly become focused on party leaders (see, e.g., Poguntke and Webb, 2005). A voter's affinity for a particular party leader, however, can not be enough for the voter to think that the party will have greater influence on the coalition's policy. The voters must also think that the leader's qualities lend themselves to achieving more favorable policy outcomes. Thus, respondents should attribute greater influence to party leaders that they think show resolve in negotiations, have deep convictions and strong principles, are hard-working, or are simply stubborn — that is, characteristics that might plausibly affect the outcome of negotiations over policy. However, it is also possible that some voters may suffer from perceptual biases in the sense that they attribute other positive qualities to particular leader because they like the leader for reasons that do not affect their bargaining skills. Similarly, because a voter finds a party leaders argument in favor of (or against) certain policies persuasive, they may assume that others will also find them persuasive.

Conjecture 4 *Leader Evaluations* *Respondents expect parties, whose leaders they like, to have more influence on the coalition's policy.*

Scholars have sought to evaluate the different perspectives on the influence of coalition parties on government policy. Budge and Laver (1992) found limited evidence for a relationship between the policy positions of government parties and government policy when comparing Comparative Manifestos

Project’s coding of manifestos and coalition agreements. Reanalyzing the data, and controlling for additional factors that might influence government policy, [Warwick \(2001\)](#) found evidence consistent with Gamson’s Law but also some evidence of a formateur advantage. [McDonald and Budge \(2005\)](#), on the other hand, argue that government policy will tend towards the preferences of the median voter, i.e., that the preferences of the median voter and the median legislator will generally be aligned and that government policy will reflect the median legislator’s preferences (as in [\(Morelli, 1999\)](#)). [McDonald and Budge \(2005\)](#), interestingly, find evidence for the ‘median mandate’, i.e., that the location of the median voter appears to better explain government policy than either the location of the median legislator or the weighted average of the government parties’ policy positions. Again, reanalyzing and treating the data as a time series, [Warwick \(2011\)](#) finds no evidence for the ‘median mandate’ thesis in favor of proportional influence of the parties in line with Gamson’s Law. However, [de Vries et al. \(2001\)](#) and [Debus \(2008\)](#), using automated methods of estimating policy positions from text, find little evidence party strength influencing policy outcomes. Overall, the evidence is rather mixed.

Our interest here, however, is not in answering the question of how much influence coalition parties have on policy but rather what voters’ perceptions about government policy are. The literature on government policy is a reasonable starting point for thinking about how voters evaluate governments in terms of policy outcomes. Based on their experiences, they may see view coalitions through the lens of Gamson’s Law or, alternatively, they may see a coalition as the Prime Minister’s government or they may simply discount the ability of governments to move policy away from the median position. The question is of considerable theoretical importance. By now there is a substantial literature that examines whether voters cast their votes strategically on the basis of their preferences for government coalitions — as opposed to casting their votes sincerely for the party that advocates policies most similar to the voters’ policy preferences.⁵ A clear understanding of how voters evaluate government coalitions is important, if not essential, to accurately test theories of coalitional voting.⁶ In turn, it address a question

⁵See, e.g., [Hobolt and Karp \(2010\)](#); [Bowler et al. \(2010\)](#); [Meffert and Gschwend \(2010\)](#); [Gschwend and Hooghe \(2008\)](#); [Abramson et al. \(2010\)](#); [Blais et al. \(2006\)](#); [Aldrich et al. \(2004\)](#); [Kedar \(2005\)](#); [Bargsted and Kedar \(2009\)](#).

⁶Some of the literature makes specific assumptions about government policy — typically it being the weighed average of the cabinet — that has no empirical support when it comes to actual information about how voters evaluate coalitions. Others have made use surveys

fundamental to the functioning of representative democracy, i.e., to what extent voters are able to exert control over the direction of government and their ability to hold government’s accountable for their actions.

Perceptions of Coalition Policy

In theoretical and empirical work, coalition policy is usually assumed to be a function of the coalition parties’ policy positions — typically a convex combination of the parties’ positions: $C = \alpha_A A + \alpha_B B = \alpha_A A + (1 - \alpha_A)B$, where A and B are the policy positions of two coalition parties, α_i is party i ’s weight, and C is the resulting government policy.⁷ When the weight of the parties’ is assumed to be proportional to their legislative or cabinet seat share — as Gamson’s Law has been taken to suggest — α_i is simply replaced with the seat share s_i .⁸

We begin by considering a simple model to estimate the weights that voters attach to each coalition party. As voters may evaluate different coalitions, or different parties, in different ways, we consider each coalition separately. For this we can employ the simple model above, which for a two party coalition reduces to:

$$C = \alpha A + (1 - \alpha)B, \tag{1}$$

where A and B now represent each voters’ perceived policy positions of the two parties. Rearranging equation 1 we obtain:

$$C = \alpha A + B - \alpha B \tag{2}$$

$$C - B = \alpha(A - B) \tag{3}$$

Thus, for each coalition we can estimate α , the weight attached to party A by simply regressing the respondent’s perceived difference between the

have included specific questions about preferences for coalitions rather than their policies.

⁷More generally, the policy can be written as $C = \sum_{i \in G} \alpha_i p_i$, where G is the set of the coalition parties, p_i the policy position of party i , and α_i the weight of party i with $\sum_{i \in G} \alpha_i = 1$.

⁸When the focus is on cabinet parties, s_i is simply equals party i ’s share of (weighted) portfolios but when the focus is on legislative seat share then $s_i = \frac{l_i}{\sum_{i \in G} l_i}$, i.e., the share of the government’s legislative majority.

government’s policy position and party B ’s policy position on the respondent’s perceived difference between the policy positions of party A and B .

We can test this model on voters’ ideological perception of three different two-party coalitions in Germany using data from the 2009 German Longitudinal Election Study (GLES) project. We use data from its short-term campaign panel (ZA5305, Version 4.0.0) component, which is an online-access-panels consisting of eligible German voters that were contacted before the national election (September 27).

The data contains measures of voters’ perceptions of parties as well as voters’ perceptions of three two party coalitions: (1) a so-called grand coalition consisting out of the two large German parties, the CDU and the SPD, (2) a so-called black-yellow coalition between the CDU and the FDP and, (3) a red-green coalition of the SPD and the Greens (B90). For all perception measures of parties (A being the first named party of a coalition, B the second named party) and coalitions (indicated by C) respondents are asked to place them on a 0 – 10 left-right scale.

The results from the estimations of the models for the three two party coalitions that respondents were asked to place on the left-right spectrum are shown in Table 1.

TABLE 1: ESTIMATED WEIGHTS OF FIRST COALITION PARTY

	COALITION		
	CDU-SPD	CDU-FDP	SPD-B90
α	0.536*** (0.006)	0.656*** (0.013)	0.538*** (0.014)
Observations	2080	2051	2034
R ²	0.77	0.55	0.43

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

Voters may take a simple approach to evaluating government coalitions and assume that the coalition parties simply split the difference in terms of policy. A quick glance at the results suggests that this is not the case. The results for the CDU-FDP coalition indicate a highly disproportional influence of the parties with $\alpha_{CDU} = .656$ and $\alpha_{FDP} = .344$. The other two coalitions come closer to parity but the null hypothesis that $\alpha = .5$ is soundly rejected

in both models.⁹

The models in Table 1 also suggest that voters do not see government policy through the lens of Gamson’s Law. Given the result of the 2009 election — thus assuming that the voters were on average able to correctly predict the outcome of the election — the weights consistent with Gamson’s Law would have been $\alpha_{CDU} = .62$ for the CDU-SPD coalition, $\alpha_{CDU} = .72$ for the CDU-FDP coalition, and $\alpha_{SPD} = .68$ for the SPD-B90 coalition. Voters do, however, appear to take the parties’ legislative strength into account. Across the three regressions the bigger party is estimated to have bigger weight and the effect increases with the party’s relatively size, e.g., the CDU carries more weight in a coalition with the FDP than the SPD. However, size is not the only thing that matters. The estimated weights for the CDU in the CDU-SPD coalition and SPD in the SPD-B90 coalition are highly similar while the parties’ actually seat share suggests that the SPD should have had greater weight.

Evaluating whether Gamson’s Law accurately describes how respondents think about coalition using actual vote results mostly serves illustrative purposes. Many respondents may have incorrect expectations about the outcome of the election and, more importantly, respondents’ expectations differ. To test the hypothesis that the parties’ influence is proportional to their size we can rewrite equation (1) as a function of the parties’ size and their ideological position:

$$C = \alpha_a V_A A + \alpha_B V_B B \quad (4)$$

where V_i denotes party i ’s contribution to the coalitions legislative majority. We use the expected vote shares of the parties as the GLES survey did not include questions about the expected seat share of the parties. Thus, $V_i = \frac{v_i}{v_i + v_j}$ where v_i is the vote share of party i and the coalition consists of parties i and j . $V_A A$ and $V_B B$ are the vote weighted policy positions of parties A and B . If the parties’ influence is proportional to their vote shares then α_A and α_B should both equal one.

Table 2 reports the results for the three coalitions. Overall, the results suggests that the parties’ influence, in the eyes of the respondents, is not

⁹For the hypotheses tests that $\alpha = .5$ result in $F_{1,2079} = 31.28$ ($p < .0001$) for the CDU-SPD coalition and $F_{1,2033} = 7.85$ ($p = .0051$) for the SPD-B90 coalition.

TABLE 2: TESTING GAMSON’S LAW
— PROPORTIONAL INFLUENCE OF COALITION PARTIES —

	COALITION		
	CDU-SPD	CDU-FDP	SPD-B90
α_1	0.947*** (0.012)	0.946*** (0.011)	0.827*** (0.015)
α_2	0.997*** (0.026)	1.149*** (0.032)	1.260*** (0.037)
OBSERVATIONS	2078	2050	2030
R ²	0.95	0.97	0.91

* p < 0.10; ** p < 0.05; *** p < 0.01.

proportional to the parties’ vote share. The results with regard to the CDU-SPD coalition come the closest with $\alpha_{CDU} = .997$ and $\alpha_{SPD} = .947$. The null hypothesis that the estimated weight for the CDU is equal to one can not be rejected while it is rejected for the weight for SPD ($F_{1,2076} = 20.51$ $p < .0001$). The results for the CDU-FDP and the SPD-B90 coalitions offer less support for proportional influence. Interestingly, and in line with the literature on portfolio allocation (see, e.g., [Browne and Frendreis, 1980](#)), the results suggest that the smaller coalition parties, the FDP and B90, have disproportional influence on the coalitions’ policies. While we have not controlled for the party of the formateur, the first named party in each coalition was expected to be the winner of the election and was, therefore, likely to act as the formateur. In each case the first named party was expected to have less influence than its vote share suggested and there are, therefore, few indications that respondents perceive their to be a formateur advantage.

Overall, the simple analysis does not show clear evidence that respondent perceive coalition policy being determined in the manner that scholars have argued or have assumed. Taken together, however, the results in [Tables 1](#) and [2](#) suggest that these theories capture some important aspects of how respondents see coalitions. That is, there does appear to be a clear relationship between the vote-weighted policies of the parties and coalition policy, i.e., the estimated coefficients are in most cases not terribly far away from unity. On the other hand, the deviations from proportional influence are in the direction of equal, rather than more unequal, influence.

Thus far it has been assumed that respondents assign the same weight to the parties — with the exception of their evaluations of the parties’ ideology and size. Respondents’ evaluations of how much weight each coalition party carries in the determination of policy may, however, vary for other reasons and we now turn to developing a model for estimating the influence of factors that systematically assign the weights respondents assign to each coalition party.

Determining the Weight of Coalition Parties

In the previous section we introduced a simple model of how voters pit their perceptions of parties’ ideological position against one another to formulate expectations about the ideological positions of two-party coalitions.

We begin by modifying our simple theoretical model in order to allow the weights voters assign to the coalition parties to depend on additional covariates while taking account of their bounded nature. We start with the model described above (equation 1) where α is the weight the voters assign to party A when placing the coalition C , consisting of A and B , on the left-right scale using the following regression model assuming normally and independently distributed errors (ϵ) with mean zero and constant variance.

$$C = \alpha A + (1 - \alpha)B + \epsilon$$

In order to obtain estimates for the weights respondents assign we need to make a detour, however, and re-parameterize it as $\alpha = \text{logit}^{-1}(\gamma) = \frac{\exp(\gamma)}{1 + \exp(\gamma)}$. Given this (non-linear) parameterization we estimate γ directly in the above regression model using non-linear least squares (Davidson and MacKinnon, 1993).¹⁰ The advantage of this parameterization is that γ is theoretically unbounded and can therefore be easily estimated. We recover the actual weight post-estimation by simply transforming $\hat{\gamma}$ given our chosen parameterization. This ensures that the estimated weight ($\hat{\alpha}$) falls in the unit interval.

If respondents follow a simple heuristic and simply take the average of the two coalition parties’ position to formulate an expectation about the coalition’s position we should find that $\alpha = .5$. Figure 1 provides an overview of our non-linear least squares results when recovering the the quantity of

¹⁰Thanks to Jeroen Weesie for pointing us to this estimation strategy. We also coded-up the above regression model in JAGS and obtained the same results.

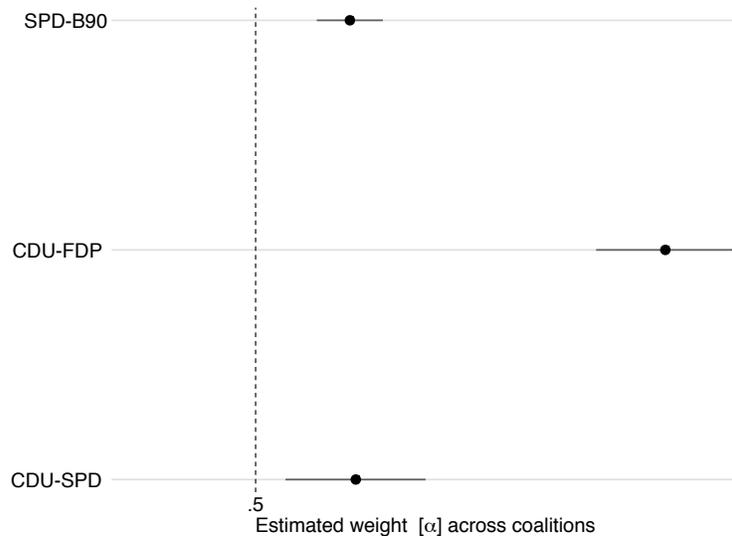


FIGURE 1: ESTIMATING THE PARTY WEIGHT (α .)

THE ESTIMATED WEIGHTS ARE SYSTEMATICALLY LARGER THAN THE NAIVE BENCHMARK OF $\alpha = .5$.

interest, i.e., the respective weight (α) of the above regression model.¹¹

When modeling the perceived ideological position of each two-party coalition as a weighted average of the respondents' perception of the party positions, we find that on average voters do not seem to think the parties have equal influence. Figure 1 shows the recovered weights together with their respective 95% confidence intervals for each of the three two-party coalitions for which we have data for. The estimated confidence intervals are to the right of the dashed .5-reference line and do not overlap it. This indicates that $\hat{\alpha} > 1 - \hat{\alpha}$ for each coalition, i.e., the estimated weight for the first-named party is bigger than the weight for the second-named party. The typical (i.e., average) respondent consistently gives more weight to the first-named party, i.e., the objectively larger party, when placing the coalition on a left-right scale. Thus, voters do not appear to naively assume that the coalition have equal influence on government policy.

¹¹Note that the only difference between the results in Table 1 and these results is the estimation strategy. The former are estimated using OLS while the latter are estimated using non-linear least squares. A comparison of the results shows that the estimated weights are virtually identical.

In the theory section we highlighted three potential factors — party size, bargaining strength and leader effects — that might explain why respondents are expected to assign greater weight to one party over the other. In order to model the weight respondents apply to the perceived party positions we expand our parameterization above to allow α to depend on a linear combination of covariates (Z), i.e., $\alpha = \text{logit}^{-1}(Z\gamma)$. In particular, we use:

$$\alpha = \text{logit}^{-1}(\gamma_0 + \gamma_1\text{PartySize} + \gamma_2\text{BargainingStrength} + \gamma_3\text{Leader})$$

Note that a positive coefficients indicates that larger values of the covariate positively affects the weight respondents assign to the first-named coalition party while a negative coefficient would reduce it but, at the same time, increase the weight of the second-named party in the coalition.

We operationalize *party size* as each respondents' expectation about party A 's vote share normalized by their expectation about the coalition parties' total vote share. As the normalized vote shares add up to one, only party A 's vote share is included in the model. The measures are constructed from a survey question that asks respondents to predict the percentage of the votes each party will gain at the federal election. The online survey panel included a field that automatically added up the respondent's predictions for all the parties. This tool helps each respondent to make valid predictions that add up to 100%. If respondents believe larger parties have an advantage in influencing government policy — in the sense that respondents place the coalition position closer to the perceived position of the larger party rather than the smaller party B — then the coefficient for vote share should be positive.

In order to operationalize perceived *bargaining strength* we construct a measure of ideological centrality. This is an unusual measure of bargaining strength. The bargaining strength of a party is usually measured in terms of the opportunities a party has to form coalitions — the idea being that if a party has credible outside options it has greater leverage in the bargaining over policy. Bargaining strength is, therefore, usually measured in terms of a party's size — as bigger parties tend to have more coalition formation opportunities — or by using bargaining power indices, e.g. the Banzhaf index, which generally focus on factors such as the number of potential minimum winning coalitions the party is a member of. We focus on ideological centrality for two main reasons. First, bargaining power indices are generally blind

in terms of ideology in that they treat a coalition of ideological proximate parties as equivalent to a coalition of ideological distinct parties. But surely, in our context, a coalition with the B90 is a more credible option for the SPD than the CDU. Second, our model already considers the parties’ vote shares, thus capturing — albeit in a rough manner — the combinatorial advantage that the larger parties enjoy. In sum, given that our model already includes a measure of numerical advantage but does not account for the fact that ideological location may also confer bargaining advantages on the parties, including a measure of ideological position is a logical step. Focusing on ideological centrality provides a simple way to capture the ideological bargaining strength — centrist parties have greater opportunities to form coalitions to the left and the right and, on average, they are closer ideological to other parties.

Ideological centrality is measured as the degree to which each party is perceived to be close to the center (at ‘5’) of the left-right scale in the following way. For every respondent we subtract the absolute distance between her placement of a party and the center of that scale from 5 (the midpoint). This generate a party-specific measure of the perceived ideological centrality of a party that ranges from 0 to 5 with higher values indicating that the party is seen as being closer to the center. We then calculate the difference between the coalition parties’ ideological centrality measures. The measure of bargaining strength then ranges from -5 to 5 and is positively related to A ’s advantage in terms of centrality. We expect a greater weight for the party that is perceived more central ideologically and, hence, a positive sign for the coefficient Δ *Ideological Centrality*.

Finally, in order to operationalize *leader* effects we use the standard 10-pt. like/dislike scores for party leaders, a functional equivalent of the well-know ‘feeling thermometer’ scores that are used in ANES. Again, we focus on the leader differential that is derived as the difference between party A ’s leader evaluation and party B ’s leader evaluation recoded to range from -1 to 1 . If respondents perceive a leader advantage this should translate into a greater weight for the advantaged party. Thus, we expect a positive sign for the respective coefficient Δ *Leader Evaluation*.

Table 3 provides an overview of the non-linear least square estimation results for the three two party coalitions: CDU-CSU (grand coalition), CDU-FDP (black-yellow coalition), and SPD-B90 (red-green coalition).

We estimate three models for each coalition. Across the models we find consistent evidence supporting our hypotheses for the two coalitions that were most likely to form on the basis of opinion polls conducted and the coalition signals sent ahead of the election; for the grand coalition consisting of the CDU and SPD as well as a black-yellow coalition consisting of CDU and FDP.

German voters have two different sources of information for deriving expectation about the policy orientation of potential coalition governments. Firstly, polling numbers are published regularly, which help citizens to identify what combinations of parties actually do stand a chance of winning a legislative majority. Secondly, parties also talk about different coalition options and, thereby, signal to voters which of those winning coalitions they prefer to form. Polls and coalition signals help voters to form reasonably clear expectations about where potential coalition governments position themselves in terms of policy.

According to opinion polls before the 2009 election in Germany,¹² the combined vote share of the SPD and the Greens was predicted to be close to the CDU's vote share but that meant the parties were still at least 10 percentage points short of winning a legislative majority. The particular context of the 2009 campaign right before Election day might be responsible for why we find so little support for our hypotheses when considering the SPD-B90 coalition. In the remainder of this paper we will focus on the other two coalitions where we seem to be able to explain how respondents weigh the ideological positions of the coalition parties in order to form expectations about the coalition's policy.

We find that our explanatory variables have a consistent effect for the two CDU coalitions (models (1) – (6)), which are robust to the inclusion of further explanatory variables. The coefficients for party size and bargaining strength are systematically positive as expected. The larger the respondents expect party *A* to be in comparison with party *B*, the more weight they place on party *A*'s position when evaluating the coalition's ideological position. This implies that respondents see the CDU (party *A* in both coalitions) — by virtue of being seen as the bigger party by most voters — as being more influential. Thus, the perceived coalition policy is closer to the perceived CDU position than the respective coalition partner, the SPD or the FDP.

Ideological centrality, as our measure of bargaining strength, also has the hypothesized effect for these coalitions. The closer the respondents consider

¹²See e.g., <http://www.wahlrecht.de/umfragen/politbarometer.htm>

TABLE 3: WHAT DETERMINES α ?

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	CDU-SPD	CDU-SPD	CDU-SPD	CDU-FDP	CDU-FDP	CDU-FDP	SPD-B90	SPD-B90	SPD-B90
Intercept	-0.217 (0.207)	-0.112 (0.205)	-0.125 (0.224)	-0.190 (0.470)	-0.031 (0.475)	-0.540 (0.534)	0.559 (0.370)	0.554 (0.370)	1.067*** (0.410)
Party A Vote Share	0.636* (0.363)	0.671* (0.359)	0.658* (0.394)	1.117* (0.641)	1.085* (0.642)	1.746** (0.733)	-0.592 (0.525)	-0.589 (0.526)	-1.399** (0.585)
Δ Ideol. Centrality		0.198*** (0.017)	0.209*** (0.020)		0.078*** (0.029)	0.080** (0.031)		0.021 (0.022)	0.025 (0.025)
Δ Candidate Eval.			0.132* (0.070)			-0.216 (0.183)			0.534*** (0.178)
N	2078	2078	1655	2050	2050	1642	2030	2030	1593
RSS	2982	2785	2034	2785	2774	2032	2532	2531	1836
Deviance	6648	6506	5038	6445	6438	5010	6210	6209	4747

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

the CDU to the ideological center, compared with their coalition partner, the greater the weight of the CDU's policy position and, consequently, the smaller the weight of the coalition partner in formulating expectations about the policy position the coalition. Finally, there is evidence of a leader advantage in the model for the grand coalition but not in the case of the CDU-FDP coalition. It could be the case that leader effects only come into play when the coalition partners are seen as relatively equal in terms of their size as is the case with the grand coalition but not with the CDU-FDP coalition. Alternatively, the political context may also be driving the effect as the grand coalition was the incumbent coalition government before the 2009 election.¹³

In evaluating the effects of bargaining strength we also considered more sophisticated measures as our claim that *Vote Share* and Δ *Ideological Difference* adequately capture the parties' bargaining strength can reasonably be questioned. Models including, e.g., the parties' scores on the Banzhaf index, interactions between vote shares and ideological centrality, and interaction between the Banzhaf index and ideological centrality were estimated but the more refined measure did not improve the fit of the models and often failed to yield statistically significant coefficients. While it is disappointing that voters fail to grasp the finer points of bargaining strength, it is also not entirely surprising. It seems reasonable that voters — that partake in elections once or twice in a four year period and observe as many coalition governments go about their business — would rely on simpler heuristics, such as party size and ideological position, to form expectations about how much influence individual coalition parties have on government policy.

The non-linear parameterization of α slightly complicates the substantive interpretation of the results but using simulations we can uncover the effects of the variables in a straightforward manner. Figure 2 graphs the effects of *Party Size* and *Bargaining Strength* for the two coalitions. The top row presents the results for the CDU-SPD coalition while the bottom row presents the results for the CDU-FDP coalition. The left column shows the average predicted weights conditional on the CDU's expected size (as a ratio of the respective expected two-party coalition vote share) holding the values of the other independent variables at their observed value for each respondent. The graphs show clearly how respondents that expected the CDU to win more votes were more likely to expect the CDU to have a bigger impact on government policy. Above we suggested that voters might rely on simple

¹³It bears noting that we find evidence of leader advantage for the SPD-B90 coalition.

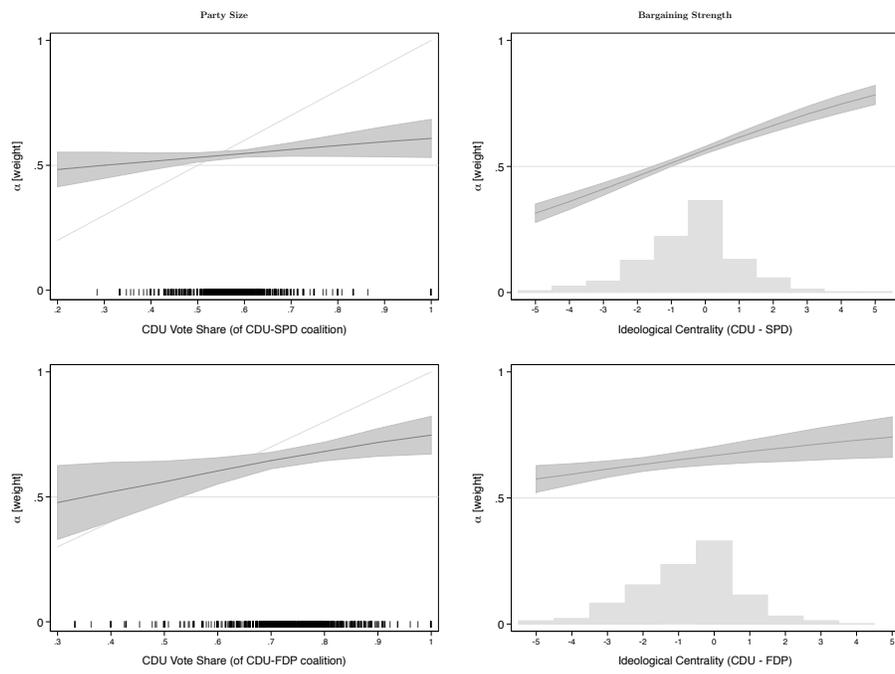


FIGURE 2: IMPACT OF PARTY SIZE & BARGAINING STRENGTH ON PARTY WEIGHT (α).

heuristics in forming expectations about coalition policy. The first heuristic involves simply assuming that the two parties have equal influence on coalition policy, i.e., $\alpha = .5$. We can quickly dismiss the equal influence heuristics as we can clearly see that the party weights do depend on the parties' vote shares. Furthermore, we can see that the predicted weights are not equal to .5 and confidence intervals for the majority of the respondents do not overlap the horizontal line drawn at .5 in the graph.

The second heuristic is the one we identified with Gamson's Law. It is also simple — respondents employing the heuristic would simply assign a weight to the party that is equal to its vote share (as a share of the coalition's vote share). The Gamson's Law heuristic is shown in the graphs — an upwards sloping line with a slope of one. While the finding that the party's vote shares have a positive effect on their influence in the coalition is what one would expect if the Gamson's Law heuristic is used, the figures make it clear that the effect of vote share is far smaller than the heuristic would lead us to expect and especially so for the CDU-SPD coalition. The Gamson's Law heuristic appears to be slightly more plausible for the CDU-FDP coalition where the line indicating the heuristic falls within the confidence interval of the estimated weight for most of the left half of the graph. However, the bulk of the respondents expect the CDU to contribute over two-thirds of the coalition's vote share (as the rug plot on the bottom shows) and for those respondents the predicted weight is significantly higher than the Gamson's Law heuristic would suggest.

Overall, then, neither heuristic appears to capture respondents' expectations about government policy and, instead, their expectations fall somewhere in between what the two heuristics would lead us to expect. In effect, that means respondents believe that minor parties have disproportional influence on policy, which echoes the findings in the literature where smaller parties receive a disproportionate share of cabinet portfolios (Browne and Frendreis, 1980). This finding also suggests that voters don't perceive a formateur advantage — although the evidence on this point is indirect as no formateurs are appointed in the German system and the conclusion can, thus, only be supported if one is willing to assume that being the biggest party confers a formateur status to the party. Finally, it is interesting to note that the estimated weight when the coalition parties are equal in size is slightly greater than .5, although only statistically so for the CDU-SPD coalition, which suggests that there is something about the CDU that distinguishes it from its coalition partners. Factors such as ideological centrality might explain this

finding but as it turns out respondents tend to consider the CDU less centrist than its coalition partners.

Ideological centrality does affect voters expectations about coalition policy position as the right column in Figure 2 show. In order to derive the average predicted weights together with their respective 95% confidence intervals, the value of Δ *Ideological Difference* was varied while other independent variables were set to their observed value for each respondent. The first thing to note about the figures is that perceived ideological centrality has a positive affect on the respondents' estimated weight. This suggests that voters may see more centrist parties as being in a stronger bargaining position. The finding could also be interpreted as indirect support for the McDonald and Budge's (2005) argument about the median mandate, i.e., that political parties will have a hard time moving policy away from the median legislator and voters, therefore, would assign less weight to the policy influence of parties that are further away from the middle of the policy spectrum. Another thing to note is that the CDU's weight, in particular in the CDU-FDP coalition scenario, tends to be higher ($> .5$) even when the CDU is disadvantaged in terms of ideological centrality — this is true when the CDU and SPD are seen as equally central and for any difference in ideological centrality in the CDU-FDP coalition. The explanation, of course, is simply that this is a result of holding the other covariates fixed at their actual values and the CDU being perceived to be the bigger party. This is interesting in the light of the fact that the distribution of the difference in ideological centrality, as shown by the histograms in Figure 2, does not favor the CDU. Thus, the effect of party size seems to dominate ideological centrality in the minds of the voters — although this is far clearer in the case of the CDU-FDP coalition than the CDU-SPD coalition.

To sum up, we find that party size and bargain strength have a consistent positive effect on the weight voters assign to a party's ability to influence government policy in the two CDU coalitions. The finding with regard to the SPD-B90 coalition, on the other hand, are more difficult to make sense of and, perhaps, have something to do with voters' perceptions of the the greens primarily being focused on the environment. A party that has a visible core issue that it is unwilling to compromise on may be perceived to have greater influence on government policy. That is, if the party is only expected to join a coalition if getting their way on that issue, then the policy influence of the party does not depend on its vote share. Leader evaluations also appear to have an effect for two of the three coalitions the respondents were asked

about. Whether the leader evaluation effect is merely capturing perceptual biases among voters or it reflects voters' evaluations of the leaders' political savvy when it comes to bargaining is a more difficult question.

Conclusions

A considerable body of work on coalition politics assumes that the policy position of coalition governments represents a weighted average of party positions, with the weights given by party size. What we find is that voters do not see things that way.

There are two ways to interpret this basic finding. The first way is to say that voters are essentially wrong and that they under-estimate the importance of party size. Some evidence in line with this view is to be found in the pattern of parameters for individual covariates. The pattern of covariates — which looks to see if the weighting reflects individual level factors such as projection effects by partisans or a special weighting given by those interested in politics — do not always provide consistent or robust results across different coalitions. Voters, then, do not understand the system in which they live. Such a result would be consistent with a body of American evidence demonstrating that voters in that country have very little knowledge of fundamental facts of US politics (Carpini, 1996; Hibbing and Theiss-Morse, 2002).

The second interpretation challenges the first. It seems a bold conjecture to say that voters — who live with coalitions on a daily basis — have little understanding of how the basic politics of government works. In some ways this is quite a different issue than asking voters to answer factual questions or to figure out the complexities of the US system of checks and balances. Furthermore, the individual level covariates do give us some basis for thinking that voters respond in predictable ways to factors that ought to influence coalitional policy positions whether they do so on the basis of sophisticated understanding of coalitional politics or on the basis of their real world experiences with coalition governments.

In some ways, of course, whether voters get it 'right' or get it 'wrong' is moot. The findings we have are that — right or wrong — this is the way that voters see things. One consequence of that is that it must, surely, influence coalition bargaining between parties. If party position taking and coalition bargains are conditional on voter expectations and/or some voters are casting their vote strategically based on expectations of coalitional politics

then voter perceptions have a role to play. What seems to be the case is that voters see things differently from many models of coalition politics. The fuller implications of this point are to be worked out in future work.

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