




RESEARCH NOTE

Electoral coalition signals and voter perceptions

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Abstract

How do electoral coalition signals affect voters' perceptions of party positions and coalition behavior in parliamentary democracies? Scholars have found that coalition signals can influence how voters view policy positions of parties. Extending research on the impact of government coalition participation on voter perceptions, a recent study found that Spanish voters update their perceptions of party positions when they receive a signal that a party joined an electoral coalition, believing it to be farther to the left (right) if the signal was of a left- (right-)leaning coalition. That study also found, in agreement with the literature, that electoral coalition signals lead to expectations of future coalition behavior. Much of the literature on electoral coalitions focuses on parliamentary democracies in Europe that use proportional representation. Since the effects of electoral coalitions might vary across contexts, we conduct a similar survey experiment in Japan, a parliamentary democracy that uses a mixed electoral system with an important disproportional component. We find no evidence that electoral coalition signals affect how Japanese voters view the ideological positions of parties, a result that matches a similar analysis conducted in Sweden. However, some coalition signals – if they contain new information – do increase Japanese respondents' expectations that certain coalitions are more likely to form in the future.

Keywords: Electoral coalition signals; Japanese parties; survey experiment

1. Introduction

In countries with stable party systems, a typical voter is fairly knowledgeable about relations between parties as well as their ideological positions (Powell, 2019). In multiparty democracies with more fluid party systems, where relationships among parties shift over time, how do voters react to information about new alliances or fractured coalitions? Accounts of potential mergers, new alliances, and conflict among existing coalition partners in the Japanese party system, for example, regularly appear in the popular media. Typical examples of political commentary contain speculations about whether disagreements between the governing parties will lead to a break-up of what is now a 20-year coalition,¹ or speculate on developments in opposition party alliances.² Does such information change voters' perceptions of the political parties involved? How voters understand the relationships among parties is important for our understanding of election outcomes, especially in multiparty parliamentary democracies where voters are expected to take partisan coalitions into account when evaluating potential governments (Blais *et al.*, 2006; Bargsted and Kedar, 2009; Duch *et al.*, 2010). In this paper, we build

¹Japan Times, 28 April 2020 (<https://www.japantimes.co.jp/news/2020/04/28/reference/ldp-komeito-political-marriage/>).

²The Mainichi, 5 October 2019 (<https://mainichi.jp/english/articles/20191005/p2a/00m/0na/006000c>).

on research examining the effect of coalition signals on voters' perceptions of parties' ideological positions by investigating voters and coalition signals in a new regional and institutional context.

From a normative standpoint, the effects of coalition signals on voters might be negative or positive. If electoral coalition signals can shift voter perceptions about the positions of parties, then voter opinion may be more volatile than is usually thought, and drawing inferences about policy preferences based on voting behavior more difficult. However, if electoral coalition signals provide voters with information about likely legislative or government coalitions, then it follows that such coalitions, if they do enter government, have a stronger policy mandate than those based only on post-electoral bargaining that occurs behind closed doors among political elites (Powell, 2000: 71–73).

Recent studies, largely based on European countries, find that coalition signals can influence how voters view party policy positions. Voters' perceptions of party ideology change when parties enter a government coalition; voters generally perceive the parties as being closer together than would have been the case in the absence of the coalition (Fortunato and Stevenson, 2013; Fortunato and Adams, 2015; Reiner mann and Faas, 2020). Falcó-Gimeno and Muñoz (2017) extend this logic, using an experimental approach, to examine the effect of coalition signals prior to elections on Spanish voter perceptions, and found that electoral coalition signals lead voters to view parties as being closer together in the policy space than would be the case otherwise, and to have a higher probability of entering government together. Using a similar experimental approach in Sweden, though, Bahnsen *et al.* (2020) found no evidence that coalition signals affect voter perceptions of party policy positions even if voters will, at least some of the time, use electoral coalition signals to inform their expectations about possible post-election governing coalitions. In this paper, we adopt the experimental approach used in Spain and Sweden and apply it in the context of the Japanese political system. Japanese voters have become used to electoral alliances and government coalitions following a change in electoral rules in the mid-1990s, though these alliances have different characteristics than those in the European cases (Liff and Maeda, 2019). Our experimental results do not suggest that they use information about new alliance arrangements to update their perceptions about the ideological positions of parties. We do find evidence, however, that coalition signals influence their expectations of possible longer-term alliance behavior, in some circumstances.

Our results about Japanese voters, parties, and elections imply more broadly that coalition signals function similarly across parliamentary democracies. Although electoral coalition signals do not influence perceptions of ideological positions of parties, they can influence respondents' expectations about the likelihood of future coalition formation. Our results provide some evidence that signals that provide new information have an effect on voter perceptions, whereas signals that match a voter's expectations don't influence their attitudes (Falcó-Gimeno and Fernandez-Vazquez, 2020). However, our results are also consistent with the claim that new information that is not observed as credible is not as likely to prompt voters to update their expectations regarding coalition behavior. Thus, coalition signals can affect voter perceptions, but such effects are likely to occur only in specific contexts.

2. Coalition signals and voter perceptions

How do voters react to coalition signals? We investigate two possible effects in this paper. First, voters might perceive a party's ideological position differently depending on the kind of coalition (or lack thereof) it signals. If voters and parties are concerned with policy, coalition signals can provide important information. Second, a pre-election coalition signal might increase a voter's assessment of the likelihood of the parties continuing their coalition behavior after the election. If voters consider post-election coalitions, in the legislature or in government, to be important, then coalition signals prior to elections can be useful.

When parties form coalitions, what information might that alliance provide voters in terms of party positions in an ideological space? A long tradition in comparative politics research, going back at least to De Swaan (1973), assumes that parties value policy and thus will prioritize forming coalitions with other parties that are close to them along some relevant policy dimensions. Thus, coalitions are more

likely to form between parties that are ideologically similar (Glasgow *et al.*, 2012). As Hjermslev (2021: 4) notes, an important implication of this argument is that ‘the choice of coalition partner is an important signal about a party’s policy positions.’ Recent literature on coalition governments in parliamentary democracies suggests that voters update their perceptions of party positions after parties have served in coalition governments together (see, e.g., Fortunato and Adams, 2015). The composition of a national governing coalition can serve as a heuristic for voters, who tend to infer that coalition partners are ideologically closer on a left-right dimension than would be the case if these same parties were not in government together. The literature suggests that parties that are ideologically close are more likely to enter government together in the first place, and then voters use their presence in a coalition together to emphasize, or exaggerate, this closeness in their perceptions of party ideology regardless of declarations of policy positions made by individual parties (Fortunato and Adams, 2015).

However, all coalition signals are not equal. When examining the effect of coalition signals on how voters perceive party ideology, Falcó-Gimeno and Fernandez-Vazquez (2020: 287) argue that voters ‘only change their perceptions when the choice of coalition partners is at odds with their initial opinions about the party’. Voters are not moved by coalition signals that match their prior expectations.

Parties shift positions on issues over time, and the most salient issue in one election is not necessarily the most salient in the next election (Hobolt and de Vries, 2015). It is, thus, reasonable to think that voters are not always aware of each party’s current policy position. Given any uncertainty over current party positions, ‘voters seeking to figure out the exact position of a party may rely on coalition signals’ (Falcó-Gimeno and Muñoz, 2017: 1455). Thus, if a voter observes a coalition signal indicating that a party would form a coalition with a party to its right, that voter might perceive the party to be positioned more to the right than would have been the case without the signal. Similarly, if a voter observes a coalition signal that the party would form a coalition with a party to its left, the voter’s perception of the party’s placement might shift leftward compared to the case where the voter received no signal of a coalition. As Falcó-Gimeno and Muñoz (2017: 1454) argue, ‘expressing a willingness to favor a specific coalition partner over another can be processed by voters as an additional piece of information on where the party stands ideologically.’

Coalition signals prior to an election might also suggest to voters that certain post-election coalitions are more likely than would otherwise be the case. Conventional wisdom suggests that in several parliamentary democracies, ‘not only do voters have views about which multi-party government they prefer, but they also have a perception of the likelihood of different coalitions emerging and cast their ballot accordingly’ (Kedar, 2012: 538; see also Blais *et al.*, 2006; Bowler *et al.*, 2010; Duch *et al.*, 2010). According to this line of reasoning, parties forming an electoral coalition provide voters with clear information about likely government coalition alternatives and allow them to take this information into account when casting their ballots (Meffert and Gschwend, 2011; Gschwend *et al.*, 2017).

If voters observe electoral coalition signals as a commitment by parties to form a more general kind of collaboration beyond the election – some kind of post-electoral alliance, which might include cooperation on legislative policy-making or entering government together after the election – then we would expect voters who received such a signal to view certain post-election coalition behavior as being more likely than would have been the case in the absence of the signal (Golder, 2005; Bowler *et al.*, 2022). Simply receiving a coalition signal may prime voters to think about post-electoral coalition formation. As Bahnsen *et al.* (2020: 3) argue, ‘coalition signals remind voters of the government formation process following the election. The fact that parties talk about coalitions brings to mind that single parties are usually not able to achieve an electoral majority. Instead, coalitions have to be formed. Thus, voters should increasingly think about potential future coalitions.’

Japan is a useful context for examining the effects of coalition signals on voter perceptions for several key reasons. Respondents have experience with coalitions, and the composition of the coalitions has varied over time so our experimental treatments providing different coalition signals will not be unfamiliar to them. Unlike countries typically examined in studies of voter perceptions of coalitions, Japan’s electoral rules have an important disproportional element which creates a different coalition formation dynamics and allows us to examine voter perceptions in a new context.

Both government and electoral coalitions are common in Japan. For the past several decades, coalition governments have been the norm (Thies, 2021). Most governments have comprised of the Liberal Democratic Party (LDP) and one or more smaller partners, but alternation in power occurs, and the LDP has also found itself in opposition as other parties formed a government. Government coalitions are typically based on electoral alliances in which parties forge nomination agreements to place only one coalition candidate in each single-member district (SMD) to avoid splitting the vote. In particular, the LDP and Komeito have maintained a stable alliance since 1999, forging electoral coalitions followed by government coalitions whenever they were successful at the polls (Liff and Maeda, 2019).

The partisan composition of coalitions varies over time, both due to existing parties switching alliances and party splits and mergers that change the shape of the party system. Although Komeito and the LDP have been coalition partners since 1999, previously Komeito was a member of an anti-LDP alliance (Metraux, 1999). The parties or coalitions standing in opposition to the LDP have not been consistent over time. For example, the New Frontier Party (NFP) was created in 1994 out of several opposition parties but it dissolved in 1997. The Democratic Party of Japan (DPJ) began in 1996 to compete against both the LDP and the NFP, and became the main opposition party over time (Hijino, 2015). Indeed, in 2009, the DPJ formed a coalition government with a couple of smaller parties (Maeda, 2010). Additional mergers and splits led to the Democratic Party being the largest opposition party in 2016 (Hino, 2017), but by 2018, following more splits and mergers, this mantle was taken by the Democratic Party for the People (DPFP) (Hino and Ogawa, 2019). Aside from the consistency of the LDP–Komeito alliance, the party system in Japan has been fairly fluid in recent decades.

Although partisan coalitions are an important feature of politics in Japan, their regular presence goes back only to the electoral system reform era of the 1990s. Elections in Japan used to be characterized by an emphasis on candidates whereas now the emphasis is on parties (Shugart, 2001). According to Reed *et al.* (2012: 255), the 2005 election, in particular, marked the point at which ‘campaigns in Japan shifted from focusing principally on the personal attributes of individual candidates toward nationalized contests based on candidates’ partisan affiliations and policy manifestos.’ The current mixed electoral system creates an incentive for parties to form electoral alliances as well; the system is dominated by single-party districts where agreements to field a single coalition candidate greatly increase a coalition’s chances of having the plurality winner in a district.

The presence of electoral coalitions following the change in electoral rules has an important impact on electoral outcomes, which in turn affect which parties get into government. Over 60% of the legislative seats in the lower house are allocated in SMDs, and the remaining seats are allocated using list proportional representation (PR). In the SMDs, typical electoral coalition agreements between, for example, a small party and a large party, ‘involved the large party agreeing not to run candidates in certain districts and asking their supporters in those districts to vote for the candidate fielded by their small-party ally. In return, the small-party ally would agree to run candidates only in the districts ‘ceded’ to them by the large party and ask their supporters in other districts to vote for the candidate of their large-party ally’ (Catalinac, 2018: 33–34). In PR electoral systems, it is often the case that parties in an electoral coalition could present voters with a joint list; this is a common approach used in European countries (Golder, 2006). Japanese parties, however, do not form joint lists and so electoral coalition partners are left making appeals to their voters. ‘LDP candidates, for example, usually ask their own personal supporters to cast their list votes for the party’s coalition partner, the Clean Government Party (Komeito, CGP), to make sure that CGP supporters would vote for them in exchange,’ although the party has no way to enforce such a directive in the PR districts (Nemoto and Tsai, 2016: 183). Compared to the European cases usually examined in studies of coalition signals and voter perceptions, Japanese voters are focused on which parties are competing in their district and any electoral coalition voting advice they get from their preferred party. The parties, for their part, focus on how voters will cast their ballots to support the coalition so that it wins as many seats as possible. Liff and Maeda (2019: 56) argue that in terms of policy, the LDP–Komeito coalition comprises ‘strange bedfellows’ and we would not expect to observe such an electoral coalition in the PR electoral systems in Europe. The Japanese electoral system has, in their words, contributed to a ‘new mode of electoral cooperation and source of pre- and post-election coalition durability.’

In sum, following decades of single-party rule under the LDP, voters have experienced a new way of evaluating their options when they go to the polls, alternation in power at the national level, coalition governments, and electoral coalitions. These changes make analyses of voter perceptions of coalition signals relevant now in a way they would not have been prior to the 1990s, both because voters are focused more on parties and because coalitions are now ubiquitous. Japan shares some core characteristics with countries previously examined in studies of voter perceptions of coalitions but the disproportional element in Japanese electoral rules provides an opportunity to compare electoral coalitions that form differently than those usually studied in a European context with more proportional electoral rules.

3. Research design

In an election campaign, parties send – or do not send – coalition signals. A coalition signal, if sent, only provides information about one specific coalition. Simply by observing the electoral campaign, we would not be able to assess whether different signals would have had different effects. In an actual election campaign, a party would not announce a coalition with a party to its left, and then announce an entirely different coalition with a party to its right. It is possible that some parties would make such different coalition announcements in different elections, but comparing the effect of these signals across elections, given the factors that vary from one election to the next, would require some heroic assumptions. We sidestep the profound difficulties of using observational data to answer our research question by taking an experimental approach. Specifically, we field a survey experiment that focuses on a vignette about a possible electoral coalition. By randomly assigning different coalition signals across vignettes to respondents who are eligible voters, we are able to identify the causal effect of these signals in the same political context.³

We know that voters' perceptions of parties' left-right positions are influenced by coalition participation once a government has been formed (Fortunato and Adams, 2015). It follows, then, that coalition announcements before a coalition takes office might also be enough to shift perceptions. That is, voters might react to a coalition announcement and use it not only to infer what post-election government coalitions might form, but also to make inferences based on new information about a party's ideological positions. This is the argument examined in a recent study in the *Journal of Politics* by Falcó-Gimeno and Muñoz (2017), which extends both the existing literature on coalition-directed voting (Duch *et al.*, 2010) and the literature on how government coalition participation affects voter perceptions of partisan ideologies (Fortunato and Adams, 2015; Spoon and Klüver, 2017). We adopt much of the experimental approach taken by Falcó-Gimeno and Muñoz (2017), so it is worth describing their study before discussing our own.

Falcó-Gimeno and Muñoz (2017) used a survey experiment during an election campaign for the regional government of Valencia, in Spain, to determine the effect of coalition signals. Survey respondents were randomly provided with information on possible electoral alliances focused either around the well-known Social Democratic Party (PSPV-PSOE) or the new, and less familiar, Liberal Party (Ciudadanos), or they were told there were no coalition agreements at all. The coalition signals associated with the two parties varied, including both a left-leaning coalition and a right-leaning coalition for each. The control group received no coalition signal at all, only a statement that regional elections were soon to be held. After receiving their treatments, respondents were asked to indicate the ideological positions of parties on a left-right ideological continuum. They were also asked how likely various government coalitions were. This experimental design allowed the authors to investigate whether electoral coalition signals affect voters' perceptions about (1) party ideology and (2) the likelihood of various post-electoral government coalitions.

³ A second order, but also important, issue is that we will know exactly what information the respondents received about possible coalitions. One issue with relying on observational data to study the effects of coalition signals is that we cannot be sure what signals are observed by voters.

Falcó-Gimeno and Muñoz (2017: 1456) present mixed findings about coalition signals and a party's perceived positions; telling potential voters that Ciudadanos was part of a right-leaning coalition shifts perceptions of the new party to the right compared to the baseline condition ($P < 0.1$), and telling them that PSPV-PSOE was part of a right-leaning coalition appears to shift perceptions of the Social Democratic Party ($P < 0.1$). The authors also make the case that ruling out a coalition, for the PSPV-PSOE, has an 'almost significant effect' on moving perceptions of the party to the right, 'perhaps because of the strong prior held by most voters that they would form a left coalition' (Falcó-Gimeno and Muñoz, 2017: 1457). The authors suggest that coalition signals that provide new information will have a larger effect compared to those that do not.⁴ Falcó-Gimeno and Muñoz (2017: 1456) also found that their treatments 'significantly affected the expectations of post-election coalition behavior' regarding both parties, though the effect was 'more modest' with respect to the more familiar PSPV-PSOE.

A similar analysis conducted with Swedish voters reveals a different story than the one in Spain. Bahnsen *et al.* (2020) examined the impact of coalition signals on perceptions of party positions and on government coalitions in the context of the 2018 general elections in Sweden. Although the authors followed the same research design as in the Spanish case, they found no evidence that coalition signals affect voter perceptions of party positions, regardless of the nature of the coalition (to the right or the left of a party). They did find some evidence, though, that voters used the coalition signals to form expectations about post-electoral governments, noting that their 'results provide strong evidence that coalition signals can change respondents' coalition expectations' (Bahnsen *et al.*, 2020: 8).

Given these conflicting results, it is worth examining the effects of coalition signals in a new context. Replicating experiments across time and space allow us to observe which results are fairly robust to context and which might be more contingent on a specific set of conditions (Walker *et al.*, 2019). We, thus, conduct a similar analysis in a third parliamentary democracy, Japan, turning to a country that is outside the usual European cases that are more typically analyzed in such studies. Similar to Spain and Sweden, Japan has a multiparty system and a government formation process that is ultimately dependent on legislative election results. When parties form electoral alliances, they do with highly visible nomination agreements in Japan's SMDs. Voters might, thus, reasonably be expected to take coalition signals into account when voting in legislative elections.

In our experiment, we focused on the main legislative parties in Japan in 2020, namely, LDP, the Constitutional Democratic Party of Japan (CDPJ), DPFP, Komeito, the Japanese Communist Party (JCP), Nippon Ishin, and the Social Democratic Party of Japan (SDPJ). Before conducting our survey, we determined the ideological positions of these parties based on the data from the Comparative Manifesto Project (Volkens *et al.*, 2017) and the Comparative Studies of Electoral Systems project (Comparative Study of Electoral Systems, 2018). In line with these data, we placed LDP and Nippon Ishin on the right, and CDPJ, SDPJ, and JCP on the left in the policy space. We placed DPFP and Komeito at the center. Using this ideological placing as a guide, we built two different coalition scenarios that either centered on (1) Komeito or (2) the DPFP.

We focus on the centrist parties in our two experiments, and examine how coalition announcements by either DPFP or Komeito influence voters' perceptions of ideological position of these parties. The creation of the DPFP dates to 2018, when the Party of Hope merged with the Democratic Party (Hino and Ogawa, 2019). Then, in 2019, the Liberal Party merged into the DPFP (Hino and Ogawa, 2020). Following these developments, several voters might be uncertain about DPFP's precise position in the policy space, and thus, the kind of coalition that DPFP forms might be especially likely to convey some information about its policy position. Komeito is generally regarded as a religion-based party

⁴In Falcó-Gimeno and Fernandez-Vazquez (2020), the authors argue that only coalition signals providing information that conflicts with voters' prior perceptions will shift opinions about party positions. The idea here is that if a coalition signal indicates that a party will form a coalition with an ideologically similar party, this does not provide new information, and so the signal will not push voters to update their perceptions of party positions. In other words, voters shouldn't be 'pre-treated' with prior information about a possible coalition signal (Druckman and Leeper, 2012).

and is often treated as centrist by scholars of Japanese politics (Laver and Benoit, 2005; Miwa, 2015). On the basis of past coalition behavior, these two parties are both in a position to make credible statements about several different coalition preferences.⁵ Because both parties, Komeito and DPFP, have possible coalition options to their left and their right, we can fully manipulate the coalition signals.

To conduct our studies, we recruited two national samples of Japanese adults through Nikkei Research, a highly reputable survey firm in Japan. Respondents from one sample completed a survey experiment about Komeito and respondents from the other sample completed a survey experiment about DPFP. In line with Nikkei's best practices, we used their provided quotas for age, gender, and location to ensure that our samples resembled the general population as much as possible.⁶ We fielded both survey experiments in parallel from 4 to 7 March 2020. In total, 2,506 respondents completed the Komeito-centered survey and 2,529 completed the DPFP-centered one.

Both surveys were structured similarly in three parts. First, we asked respondents to answer questions about their socio-demographic background (gender, age, education, income, and political ideology).⁷ Second, we had respondents complete an experimental component. We used a post-test-only design that assigned respondents to one of several treatments, described further below, with equal probability (Trochim and Donnelly, 2001). Third, we collected two outcome measures, which capture respondent (1) perceptions of party positions and (2) expectations about what coalitions were most likely to form.

The experimental treatments involved presenting a variety of coalition signals, either with respect to Komeito or with respect to DPFP, depending on the survey. Within each survey, respondents were given a randomly drawn vignette in which one of the following signals was provided: no coalition will form (Rule Out treatment); the party will coalesce with right-leaning parties (Right-leaning Coalition treatment); or the party will coalesce with left-leaning parties (Left-leaning Coalition treatment).⁸ For Komeito, we created three right-leaning coalition scenarios for the pre-election coalition: a Komeito–LDP–Nippon Ishin coalition, a Komeito–LDP coalition, and a Komeito–Nippon Ishin coalition. Since the incumbent government at the time of our survey comprised of Komeito and the LDP, we wanted some variation in possible right-leaning coalitions. In addition, we generated one left-leaning coalition scenario, a Komeito–DPFP–CDPJ–SDPJ–JCP coalition. For the DPFP, one right-leaning coalition scenario was built, a DPFP–Komeito–Nippon Ishin coalition. In addition, one left-leaning coalition scenario was constructed, a DPFP–CDPJ–SDPJ–JCP coalition. Within each survey, a control group received a baseline text with no mention of coalitions.

Tables 1 and 2 present the experimental treatments for the Komeito- and DPFP-focused surveys, respectively.⁹ The control (or placebo or baseline) vignette reads as follows: 'Rumors have been circulating that early elections might be called before the Tokyo Olympics. Suppose you will be participating in this upcoming lower house election.' For the other vignettes, we added a short statement about a party's coalition plans. For example, the vignette for Komeito's 'Rule Out' scenario was presented as follows: 'Rumors have been circulating that early elections might be called before the Tokyo Olympics. Several political analysts agree that, given the statements and signals sent by Komeito, there is a high probability that [it will not form any electoral alliances in the next election.] Suppose you will be

⁵Although the long-standing cooperation between the LDP and Komeito is familiar to voters, it is not set in stone. 'Right after the election debacle of 2009, Komeito tried to recover by presenting itself as an independent actor with its own set of policies. For more than two years it advertised itself as the "third force" in the Japanese party system, as a clear-cut alternative to the two larger parties DPJ and LDP' (Klein, 2013: 84).

⁶We also used Nikkei Research's translation service and had their translations checked by bilingual staff at the Tokyo Foundation for Policy Research.

⁷To avoid any effects from the order of the questions, we divided these questions into two blocs and randomized their display order. We also randomized the order of questions within each bloc.

⁸Note that those who received a Komeito vignette did not receive a vignette for DPFP while those who received a DPFP vignette did not receive a vignette for Komeito.

⁹The Japanese language versions of the vignettes are presented in the Appendix.

Table 1. Komeito-focused treatments

Rule Out	Several political analysts agree that, given the statements and signals sent by Komeito, there is a high probability that it will not form any electoral alliances in the next election.
Right-leaning coalitions	<ol style="list-style-type: none"> (1) Several political analysts agree that, given the statements and signals sent by Komeito, there is a high probability that it will form an electoral alliance with Liberal Democratic Party (LDP) and Nippon Ishin no Kai in the next election. (2) Several political analysts agree that, given the statements and signals sent by Komeito, there is a high probability that it will form an electoral alliance with Liberal Democratic Party (LDP) in the next election. (3) Several political analysts agree that, given the statements and signals sent by Komeito, there is a high probability that it will form an electoral alliance with Nippon Ishin no Kai in the next election.
Left-leaning coalition	Several political analysts agree that, given the statements and signals sent by Komeito, there is a high probability that it will form an electoral alliance with the Democratic Party for the People (DPFP), Constitutional Democratic Party of Japan (CDPJ), Social Democratic Party of Japan (SDPJ), and Japanese Communist Party (JCP) in the next election.
Control	Rumors have been circulating that early elections might be called before the Tokyo Olympics.

Table 2. DPFP-focused treatments

Rule Out	Several political analysts agree that, given the statements and signals sent by the Democratic Party for the People (DPFP), there is a high probability that it will not form any electoral alliances in the next election.
Right-leaning coalition	Several political analysts agree that, given the statements and signals sent by the Democratic Party for the People (DPFP), there is a high probability that it will form an electoral alliance with Komeito and Nippon Ishin no Kai in the next election.
Left-leaning coalition	Several political analysts agree that, given the statements and signals sent by the Democratic Party for the People (DPFP), there is a high probability that it will form an electoral alliance with Constitutional Democratic Party of Japan (CDPJ), Social Democratic Party of Japan (SDPJ), and Japanese Communist Party (JCP) in the next election.
Control	Rumors have been circulating that early elections might be called before the Tokyo Olympics.

participating in this upcoming lower house election.’ The text in the square brackets is changed according to the signal being provided.¹⁰

After being presented with possible coalition scenarios, we collected two outcome measures. First, respondents were asked to indicate the ideological position of each party on a left-right spectrum, where the spectrum ranged from 0 (left) to 10 (right). Second, we also asked how likely people believe that certain party alliances will occur. Respondents were asked ‘How likely are the following electoral alliance situations in the next lower house elections?’ Then, respondents were asked to provide their answers based on four response options: Very Unlikely, Somewhat Unlikely, Somewhat Likely, and Very Likely. We provided the No Coalition scenario, the right-leaning scenario(s), and the left-leaning scenario.¹¹ The idea, to remind the reader, is that coalition signals will prime voters to be thinking about coalitions generally (Bahnsen *et al.*, 2020: 3).

Both the Spanish and Swedish experimental treatments specified that the parties were expected to join (or reject joining) government coalitions following the election. As mentioned previously, electoral coalition signals in countries with PR are often signals about post-election coalition formation (Golder, 2006). Our treatment focuses on the formation of an electoral alliance, that is, prior to the election, which is different than the approach taken in the earlier studies. This is because electoral

¹⁰In the Japanese version of the questionnaire, different words were used to describe electoral alliances (*renritsu* in some cases and *kyoto* in others). We believe that respondents understood the intention of the text and that the inferences we can draw are not affected by the differences in these terms. For more information, see the discussion in the Appendix.

¹¹For the Komeito treatments, the right-leaning scenario was the broadest coalition, comprising Komeito, LDP, and Nippon Ishin.

coordination in Japan is typically characterized by voting instructions from parties and nomination agreements rather than statements about the post-electoral composition of the government. Although Japanese voters may anticipate that parties that form electoral coalitions are likely to enter government together if they win enough seats, we did not think the phrasing of the treatments from the Spanish and Swedish experiments would fit the Japanese case well.

4. Results

Before examining the effects of the treatments on voter perceptions, we examine the placements of political parties made by respondents in our control group. This provides information on how Japanese respondents perceive party placement absent any coalition signal. Table A1 in the Appendix provides the average placements, on a 0–10 left-right scale, for each of the seven political parties according to the respondents who were in the control group in each survey. As mentioned above, based on expert opinions and campaign manifesto data, we considered the JCP, SDPJ, and CDPJ to be on the left, DPFP and Komeito to be centrist, and the LDP and Nippon Ishin to be on the right. The basic ordering of parties, according to our respondents, agrees with this classification with the exception of Nippon Ishin, which they placed between DPFP and Komeito. Thus, Nippon Ishin was not seen as being as far to the right as we had expected, while Komeito was more to the right.¹²

Moving on from this baseline, we next examine the effects of our treatments on the perceived left-right positions of our two centrist parties. Do respondents update their perceptions of a party's ideological placement after receiving a coalition signal? Figure 1 shows the effect of a signal about Komeito's coalition behavior on a respondent's perception of Komeito's policy location, compared to the control, or a baseline condition in which no coalition signal was provided. For the full model, see model 1 in Table A2 in the Appendix. The ideological scale of the dependent variable, the perceived ideology of Komeito, was such that higher numbers indicated perceptions that were farther to the right. We include some respondent pre-treatment characteristics in this model to increase efficiency (gender, age, level of education, ideology, and income) but the results from a model without these covariates are nearly identical (see model 2 in Table A2 in the Appendix). Importantly, none of the treatment effects is statistically distinguishable from zero at the 0.05 level.

Figure 2 shows the effect of a signal about the DPFP's coalition behavior on a respondent's perception of the position of that party. For the full model, see model 1 in Table A3 in the Appendix. As before, we include some respondent pre-treatment characteristics in this model, but a model without these covariates is nearly identical (see model 2 in Table A3 in the Appendix). As was the case with the Komeito treatment, none of the treatment effects is statistically distinguishable from zero at the 0.05 level. Thus, after considering the results from our two separate experiments, there is little evidence that respondents update their perceptions of a party's policy position based on coalition signals.

Second, we examine the effects of our treatments on the respondents' perceived likelihood of different coalitions forming. Figure 3 shows the effect of the Komeito treatments on the perceived likelihood of a particular coalition forming in the future. We consider treatments in which respondents were told no coalition would form, in which a left-wing coalition (Komeito, DPFP, CDPJ, SDPJ, and JCP) would form, or in which a right-wing coalition (Komeito, LDP, and Nippon Ishin) would form. This figure is based on models 1, 3, and 5 in Table A4 in the Appendix.

Signaling that Komeito would join a right-leaning coalition had no effect on the coalition expectations of respondents. Signaling that Komeito would not join a coalition, or that it would join a

¹²Other scholars have also noted a similar discrepancy between voter perceptions of party positions and the expert opinions, particularly with respect to Komeito. As Miwa (2015: 131) notes, 'informed respondents' perceptions of the CGP differ from those of experts. Political researchers in Japan think that the CGP [Komeito] is a centrist party, whereas informed respondents consider it to be rather right. This is perhaps because the CGP formed a coalition with the LDP, which is seen as the most right-wing party in Japan, and voters use this as a cue to infer its position' (Fortunato and Stevenson, 2013).

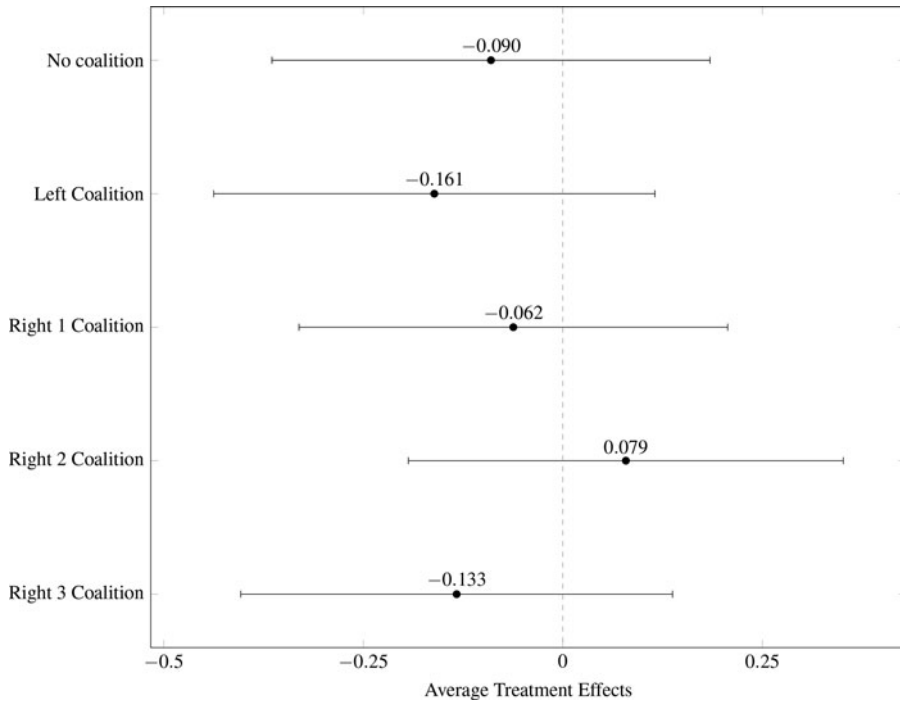


Figure 1. Effect of coalition treatments on voters' perception of Komeito's ideological position.

Note: The circles show the average treatment effect (ATE) of coalition signals on the perception of Komeito's policy position. The right 1 coalition comprised of LDP–Komeito–Nippon Ishin, the right 2 coalition comprised of LDP–Komeito, and the right 3 coalition comprised of Komeito–Nippon Ishin. Sociodemographic characteristics were used as control variables. The 95% confidence intervals are indicated with bars. The dependent variable, *Perception of Komeito Ideological Position*, is measured on a 0–10 (left–right) scale. ATEs are based on the results from model 1 in Table A2.

left-leaning one, did make respondents more likely to expect such coalition behavior in the future, compared to respondents in the control group ($P < 0.05$).¹³

Figure 4 shows the effect of the DFPF treatments on the perceived likelihood of a particular coalition forming in the future. It is based on models 1, 3, and 5 in Table A5 in the Appendix. Receiving a signal of no coalition or a left-leaning coalition has no statistically significant effect on respondents, but a right-leaning coalition signal does produce a significantly higher expectation of the coalition occurring compared to the control group ($P < 0.05$).¹⁴

Overall, what we observe seems consistent with the more general claim in the literature that novel information has a higher impact (Druckman and Leeper, 2012). This is because treating respondents with a signal that matches the information that they have previously gleaned from their real-world experiences (Komeito has been in right-leaning coalitions recently, while the DFPF has been in left-leaning ones) seems to have no effect. However, new information – in this context about coalition signals that do not have a historical antecedent – could be influencing perceptions, as we might expect based on Falcó-Gimeno and Fernandez-Vazquez (2020). Our results might also reflect a situation in which respondents don't find treatment scenarios credible.¹⁵ For example, we cannot determine whether a 'no coalition' signal with respect to the DFPF provided no new information or whether

¹³The results from the models without the sociodemographic characteristics of respondents (see models 2, 4, and 6 in Table A4 in the Appendix) are nearly identical.

¹⁴As above, the results from the models without the sociodemographic characteristics of respondents (see models 2, 4, and 6 in Table A5 in the Appendix) are nearly identical.

¹⁵We thank an anonymous reviewer for raising this point.

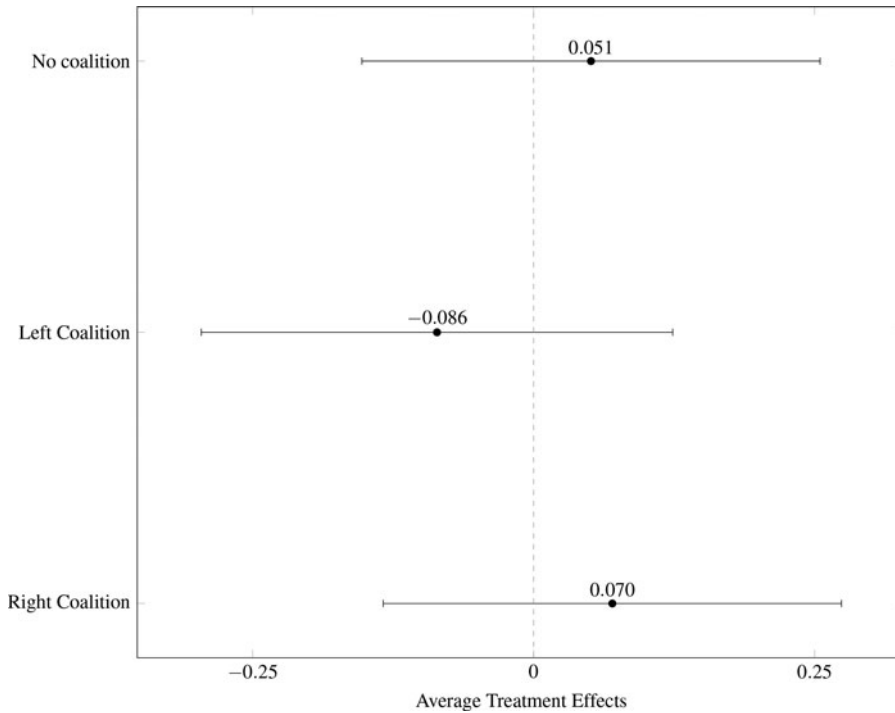


Figure 2. Effect of coalition treatments on voters' perception of DPPF's ideological position.

Note: The circles show the average treatment effect of coalition signals on the perception of DPPF's policy position. Sociodemographic characteristics were used as control variables. The 95% confidence intervals are indicated with bars. The dependent variable, *Perception of DPPF Ideological Position*, is measured on a 0–10 (left-right) scale. ATEs are based on the results from model 1 in Table A3.

it seemed unlikely because respondents expect the DPPF will be cooperating with other parties. Future research could usefully try to distinguish the impact of novelty from that of credibility in the various treatment scenarios.

5. Conclusion

Although scholars of Japanese politics have investigated how electoral system reform changed voter's incentives to vote for parties rather than candidates (Reed *et al.*, 2012), we know less about the preferences of voters with respect to the coalitions that regularly form under the new electoral system.¹⁶ Does a party's participation in coalitions matter for voters, and if so, how? In this study, we were particularly interested in whether coalition signals affect voter perceptions of parties' ideological positions, following a recent claim in the literature that electoral coalition signals can shift voters' views on party positions (Falcó-Gimeno and Muñoz, 2017). If voters take policy into account when casting a ballot, electoral outcomes could be affected by such updates to their perceptions of party positions. In our study, though, we found no evidence that coalition signals play such a role for Japanese voters.¹⁷ The claim that coalition signals are helpful to voters in shaping their views of which coalitions are more likely to end up in government has a longer history and more support in the literature, and is a common assumption in research on multiparty parliamentary democracies. We found some evidence here that coalition signals could play such a role for Japanese voters.

¹⁶We thank an anonymous reviewer for highlighting this point.

¹⁷Our replication of the Spanish study and the replication conducted in Sweden (Bahnsen *et al.*, 2020) agree on this point; electoral coalition signals do not affect voter perceptions of party positions in the ideological space.

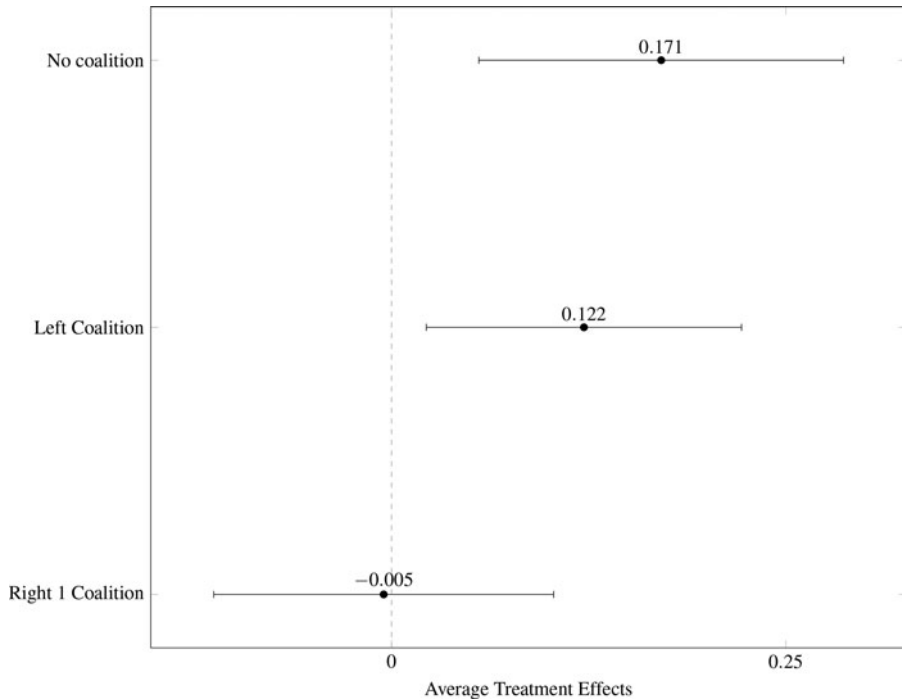


Figure 3. Effect of coalition treatment on voters' expectation of the likelihood of the formation of a coalition (Komeito treatment). *Note:* The circles show the average treatment effect of coalition signals on perceived coalition likelihoods. Sociodemographic characteristics were used as control variables. The 95% confidence intervals are indicated with bars. The dependent variable, *Likelihood of coalition formation*, is measured on a scale from 1 'very unlikely' to 4 'very likely.' ATEs are based on the results from models 1, 3, and 5 in Table A4.

Given that signals of electoral coordination do not seem to have any impact on Japanese voters' perceptions of party policy positions, there is no reason to expect such signals to prompt any changes in voter behavior. However, we did find evidence that coalition signals can shift voter perceptions about the likelihood of future cooperation. The statement about parties cooperating in our treatment vignettes was phrased in a fairly general way and we think it likely that voters, drawing on their knowledge of coalition behavior in the political system, would expect parties that form electoral alliances to cooperate on legislative policy-making and to enter government together if they receive sufficient support at the polls (Gschwend *et al.*, 2017).

Our results also suggest that new alliances, particularly if they are unexpected, can shift voter perceptions of the different alternatives facing them at the polls. Alliance signals that reinforce existing expectations don't provide new information (Druckman and Leeper, 2012) and so not all signals should be expected to have the same effect. If it is additionally the case that the credibility of the coalition matters for voter support, then parties forming novel cooperation agreements should take care to emphasize that the parties in the coalition are coordinating their electoral and policy strategy effectively. Arranging comprehensive nomination agreements should be taken as a strong signal that parties can cooperate, but explicit signs of some shared policy goals would also increase the coalition's claim to be a credible alternative at the ballot box.

Japan shares some core characteristics with countries previously examined in studies of voter perceptions of coalitions – it is a multiparty parliamentary democracy – but the disproportional element in Japanese electoral rules provides an opportunity to examine electoral coalitions that form differently than those usually studied in a European context with more proportional electoral rules. The results of nomination agreements in SMDs are evident to voters when they go to vote, and parties explicitly

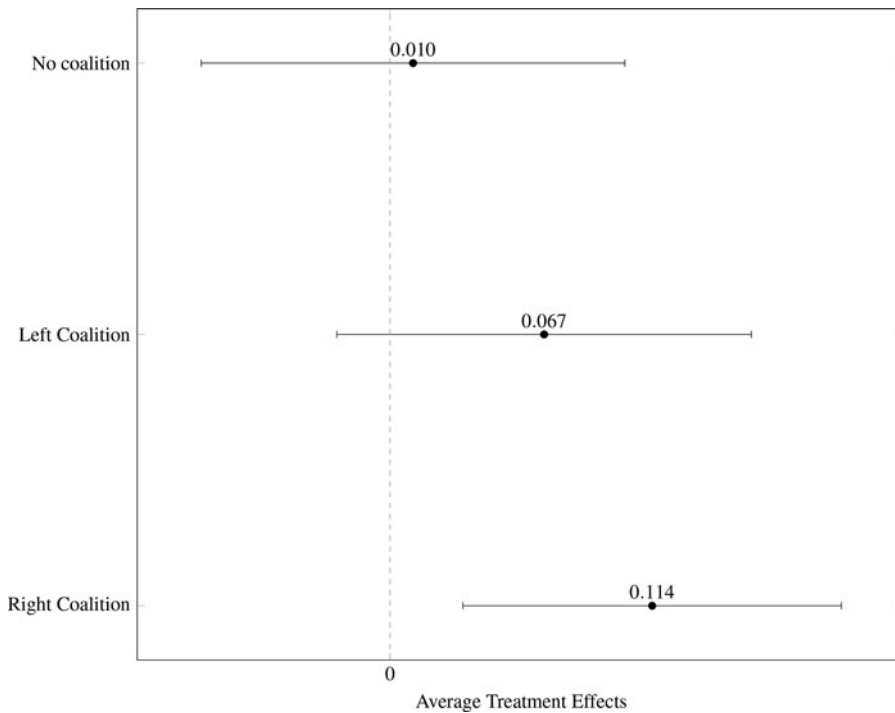


Figure 4. Effect of coalition treatment on voters' expectation of the likelihood of the formation of a coalition (DPFP treatment). *Note:* The circles show the average treatment effect of coalition signals on perceived coalition likelihoods. Sociodemographic characteristics were used as control variables. The 95% confidence intervals are indicated with bars. The dependent variable, *Likelihood of coalition formation*, is measured on a scale from 1 'very unlikely' to 4 'very likely.' ATEs are based on the results from models 1, 3, and 5 in Table A5.

encourage their voters to support coalition candidates. Additionally, it seems reasonable to think that Japanese voters are well aware of coalitions in government and that they are also aware of media discussions of alliances among parties prior to elections. Further research is needed to investigate the extent to which party cooperation (in electoral coalitions, in legislative policy-making, and in government) affects voter perceptions. Although our results suggest that electoral coalition signals don't have an immediate impact on voter perceptions of policy positions, the circumstances under which coalition signals affect voter perceptions about future cooperation between parties is less clear. We hope that future research will engage more directly with the extent to which voter perceptions of party positions are shaped by government coalition participation or sustained legislative cooperation.

It might also be useful to consider the impact of other potentially important features of the Japanese party system on voter perceptions, such as the mixture of programmatic and particularistic appeals by parties, as well as the presence of a fairly dominant party. Although Japanese politics have become more programmatic since the 1990s electoral reform (McElwain, 2015: 103), particularistic 'pork-barrel' politics remain important (Christensen and Selway, 2017). One might also speculate that the fairly dominant role played by the Liberal Democratic Party in most elections and most governments might dampen the effect of coalition signals somewhat. We leave an exploration of whether these aspects of the Japanese political context affect the impact of coalitions on voter perspectives for future research.

Supplementary material. The supplementary material for this article can be found at <https://doi.org/10.1017/S1468109922000020> and <https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/LMBPJR>

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registered at the Open Science Framework (https://osf.io/9f3xj/?view_only=8e0bbe27c1e64664bec673dd81a7a9a8). We thank Yoshi Ono for his helpful feedback. All data and computer code necessary to replicate the results in this analysis will be made publicly available on our webpages after publication. R 4.0.3 was the statistical package used in this study.

Conflict of interest. The authors declare none.

References

- Bahnsen O, Gschwend T and Stoetzer LF** (2020) How do coalition signals shape voting behavior? Revealing the mediating role of coalition expectations. *Electoral Studies* **66**, 1–23.
- Bargsted MA and Kedar O** (2009) Coalition-targeted Duvergerian voting: how expectations affect voter choice under proportional representation. *American Journal of Political Science* **53**, 307–323.
- Blais A, Aldrich JH, Indridason I and Levine R** (2006) Do voters vote for government coalitions? Testing Downs' pessimistic conclusions. *Party Politics* **12**, 691–705.
- Bowler S, Karp JA and Donovan T** (2010) Strategic coalition voting: evidence from New Zealand. *Electoral Studies* **29**, 350–357.
- Bowler S, McElroy G and Müller S** (2022) Voter expectations of government formation in coalition systems: the importance of the information context. *European Journal of Political Research* **61**, 111–133.
- Catalinac A** (2018) Positioning under alternative electoral systems: evidence from Japanese candidate election manifestos. *American Political Science Review* **12**, 31–48.
- Christensen R and Selway JS** (2017) Pork-Barrel politics and electoral reform: explaining the curious differences in the experiences of Thailand and Japan. *The Journal of Asian Studies* **76**, 283–310.
- Comparative Study of Electoral Systems** (2018) CSES Module 4 Full Release (dataset and documentation). 29 May 2018 version. doi: 10.7804/cses.module4.2018-05-29
- De Swaan A** (1973) *Coalition Theories and Government Formation*. Amsterdam: Elsevier.
- Druckman JN and Leeper TJ** (2012) Learning more from political communication experiments: pretreatment and its effects. *American Journal of Political Science* **56**, 875–896.
- Duch RM, May J and Armstrong DA** (2010) Coalition-directed voting in multi-party democracies. *American Journal of Political Science* **104**, 698–719.
- Falcó-Gimeno A and Muñoz J** (2017) Show me your friends: a survey experiment on the effect of coalition signals. *Journal of Politics* **79**, 1454–1459.
- Falcó-Gimeno A and Fernandez-Vazquez P** (2020) Choices that matter: coalition formation and parties' ideological reputations. *Political Science Research and Methods* **8**, 285–300.
- Fortunato D and Stevenson RT** (2013) Perceptions of partisan ideologies: the effect of coalition participation. *American Journal of Political Science* **57**, 459–477.
- Fortunato D and Adams J** (2015) How voters' perceptions of junior coalition partners depend on the prime minister's position. *European Journal of Political Research* **54**, 601–621.
- Glasgow G, Golder M and Golder SN** (2012) New empirical strategies for the study of parliamentary government formation. *Political Analysis* **20**, 248–270.
- Golder SN** (2005) Pre-electoral coalitions in comparative perspective: a test of existing hypotheses. *Electoral Studies* **24**, 643–663.
- Golder SN** (2006) *The Logic of Pre-Electoral Coalition Formation*. Columbus: Ohio State University Press.
- Gschwend T, Meffert MF and Stoetzer LF** (2017) Weighting parties and coalitions: how coalition signals influence voting behavior. *Journal of Politics* **79**, 642–655.
- Hijino K** (2015) Bamboo shoots and weak roots: organizational expansion of new parties in Japan. *Japanese Journal of Political Science* **16**, 270–295.
- Hino A** (2017) Japan. *European Journal of Political Research Political Data Yearbook* **56**, 159–169.
- Hino A and Ogawa H** (2019) Japan: political development and data for 2018. *European Journal of Political Research Political Data Yearbook* **58**, 162–169.
- Hino A and Ogawa H** (2020) Japan: political development and data in 2019. *European Journal of Political Research Political Data Yearbook* **59**, 214–224.
- Hjermitslev IB** (2021) Mainstream sell-outs? How collaboration with the radical right changes perceptions of party positions on immigration. *Government and Opposition* **57**, 1–20.
- Hobolt SB and de Vries CE** (2015) Issue entrepreneurship and multiparty competition. *Comparative Political Studies* **48**, 1159–1185.
- Kedar O** (2012) Voter choice and parliamentary politics: an emerging research agenda. *British Journal of Political Science* **42**, 537–553.
- Klein A** (2013) Komeito – the first 'third force'. In Pekkanen R, Reed SR and Scheiner E (eds), *Japan Decides 2012: The Japanese General Election*. New York: Palgrave Macmillan, pp. 84–98.

- Laver M and Benoit K** (2005) Estimating party policy positions: Japan in comparative context. *Japanese Political Science Review* 6, 187–209.
- Liff AP and Maeda K** (2019) Electoral incentives, policy compromise, and coalition durability: Japan's LDP–Komeito government in a mixed electoral system. *Japanese Journal of Political Science* 20, 53–73.
- Maeda K** (2010) Factors behind the historic defeat of Japan's Liberal Democratic Party in 2009. *Asian Survey* 59, 888–907.
- McElwain KM** (2015) Party system institutionalization in Japan. In Hicken A and Martinez Kuhonta E (eds), *Party System Institutionalization in Asia: Democracies, Autocracies, and the Shadows of the Past*. Cambridge: Cambridge University Press, pp. 74–107.
- Meffert MF and Gschwend T** (2011) Polls, coalition signals and strategic voting: an experimental investigation of perceptions and effects. *European Journal of Political Research* 50, 636–667.
- Metraux DA** (1999) Japan's search for political stability: the LDP–new Komeito alliance. *Asian Survey* 39, 926–939.
- Miwa H** (2015) Voters' left-right perception of parties in contemporary Japan: removing the noise of misunderstanding. *Japanese Journal of Political Science* 16, 114–137.
- Nemoto K and Tsai C-H** (2016) Post allocation, list nominations, and preelectoral coalitions under MMM. In Batto NF, Huang C, Tan AC and Cox GW (eds), *Mixed-Member Electoral Systems in Constitutional Context: Taiwan, Japan, and Beyond*. Ann Arbor: University of Michigan Press, pp. 165–193.
- Powell GB** (2000) *Elections as Instruments of Democracy*. New Haven: Yale University Press.
- Powell GB** (2019) *Representation, Achieved and Astray: Elections, Institutions and Ideological Congruence in Parliamentary Democracies*. New York: Cambridge University Press.
- Reed SR, Scheiner E and Thies MF** (2012) The end of LDP dominance and the rise of party-oriented politics in Japan. *The Journal of Japanese Studies* 38, 353–376.
- Reinermann H and Faas T** (2020) Friends and foes: how coalition formats shape voter perceptions of the party system. In Bukow S and Jun U (eds), *Continuity and Change of Party Democracies in Europe*. Weisbaden: Springer VS, pp. 343–366.
- Shugart MS** (2001) Electoral 'efficiency' and the move to mixed member systems. *Electoral Studies* 20, 173–193.
- Spoon J-J and Klüver H** (2017) Does anybody notice? How policy positions of coalition parties are perceived by voters. *European Journal of Political Research* 56, 115–132.
- Thies MF** (2021) The era of coalition government in Japan: the institutional logic of surplus majorities and strange bedfellows. In Pekkanen RJ and Pekkanen SM (eds), *The Oxford Handbook of Japanese Politics*. Oxford: Oxford University Press, pp. 183–200.
- Trochim WMK and Donnelly JP** (2001) *Research Methods Knowledge Base*, Vol. 2. New York: Atomic Dog Pub.
- Volkens A, Lehmann P, Matthieß T, Merz N, Regel S and Weißels B** (2017) The Manifesto Data Collection. Manifesto Project (MRG/CMP/MARPOR). Version 2017b. Berlin: Wissenschaftszentrum Berlin für Sozialforschung (WZB). <https://doi.org/10.25522/manifesto.mpds.2017b>.
- Walker RM, Brewer GA, Lee MJ, Petrovsky N and Van Witteloostuijn A** (2019) Best practice recommendations for replicating experiments in public administration. *Journal of Public Administration Research and Theory* 29, 609–626.