Costly Signals: Voter Responses to Parliamentary Dissent in Austria, Britain, and Germany

When Members of Parliament (MPs) disagree publicly with their party, this provides a signal to voters regarding both their political views and their character valence. We argue that the strength of this signal to voters depends on the personal career costs an MP incurs by dissenting. The greater the perceived costs of dissent to the MP, the more positively voters should react to dissent. In line with this theory, we use a series of conjoint analysis experiments in Britain, Germany, and Austria to show that: (1) dissent has a more positive effect on voter evaluations in systems where the costs of dissent are higher, and (2) more costly types of dissent have a greater impact on voter evaluations. These findings have important implications for understanding how voter evaluations of MPs depend on beliefs about parliamentary systems and how parliamentary institutions condition the link between voters and MPs.

Introduction

What do voters in parliamentary democracies think of legislative representatives who dissent from the party line? Theories of parliamentary behavior often posit assumptions about the electoral reward (or personal vote) that legislators may or may not receive for dissent, by which we mean any action by which a representative signals disagreement with the party leadership (Benedetto and Hix 2007; Carey 2007; Kam 2009; Sieberer 2006; Slapin et al. 2018). Motivated in part by the desire to unpack and test assumptions about electoral rewards, a growing number of researchers have studied whether voters reward parliamentary dissent and whether
they view it as a signal of policy position (e.g., Canes-Wrone, Brady, and Cogan 2002; Kam 2009; Kirkland and Slapin 2018; Pattie, Fieldhouse, and Johnston 1994) or of valence (Campbell et al. 2019; Carson et al. 2010). However, whereas theories of legislator dissent have increasingly emphasized the role of electoral and legislative institutions in shaping the incentives of parliamentarians (e.g., Benedetto and Hix 2007; Carey and Shugart 1995; Kam 2009; Slapin et al. 2018), there has been little corresponding research examining whether and how voter reactions to dissent vary in different settings and contexts (though see Doherty 2013). In this article, we redress this imbalance by developing and testing a theory of how voter reactions to dissent vary across and within political systems as a function of the context and type of that dissent.

Dissent allows MPs to stand up for what they believe in and to signal to voters how their policy stances differ from those of the party (Canes-Wrone, Brady, and Cogan 2002; Pattie, Fieldhouse, and Johnston 1994; Proksch and Slapin 2015; Slapin et al. 2018; Vivyan and Wagner 2012). If the policy position signalled by dissent matters, then voters who are ideologically opposed to the party line will respond positively to defection by MPs in the same ideological direction (Ansolabehere and Jones 2010; Canes-Wrone, Brady, and Cogan 2002). However, dissent may also be interpreted as a costly signal of character valence (and not just position) by voters (Campbell et al. 2019): voters may believe that MPs who dissent possess desirable character traits such as resolve and trustworthiness because they are willing to incur the personal career costs of dissent. Parliamentary voting is not unique in this regard: other types of costly legislative action, such as policy obstruction (Patty 2016) or ideologically suboptimal committee assignments (Patty et al. 2019), might also be treated as signals of valence by voters. So dissent may be interpreted in terms of both position and valence; in this article, we focus on the latter type of voter response.

Based on the idea that dissent is in part a costly signal of valence, we argue that voter reactions to dissent should vary across and within political systems as a function of the cost of dissent. We start from the observation that such costs are not constant. For example, they vary by type of dissent: MPs may be punished more for voting against their party in the legislature than for speaking out in the media (Proksch and Slapin 2015). They also vary by institutional setting: dissent may be punished more in contexts where parliamentary parties have more carrots and sticks at their
We also argue that voters are aware, at least to some extent, of the potential risks run by an MP who defects from the party line. In other words, the institutional differences in the costs of dissent affect voter perceptions of how costly dissent is. Moreover, voters are also aware that different types of dissent exist, and that these carry different costs for MPs. Voter evaluations of an MP will in turn be more affected by dissent when that dissent is seen as more costly. Hence, we expect voters to discount actions that may not reveal much about MPs’ character and beliefs.

We develop two key observable implications arising from this argument. First, the positive impact of dissent on voter evaluations of an MP should be greater in institutional settings where dissent is more costly, at least to the extent that voters are aware of these costs. Second, within a political system, different types of dissent—for example, dissent in the media versus dissenting votes in parliamentary votes—should have different effects on voter evaluations of an MP, with a greater effect for those types of dissent seen as incurring greater career costs.

We test our expectations by running conjoint analysis experiments (Hainmueller, Hopkins, and Yamamoto 2014) where respondents are asked to rate pairs of hypothetical Members of Parliament (MPs) characterized by several randomly varying attributes, including their dissent behavior. Importantly, we also include information on the policy preferences of the MP as well as party affiliation, characteristics that might otherwise be associated with (or “aliased” by) dissent (Hainmueller, Hopkins, and Yamamoto 2014).

We ran these experiments on samples of voters in three countries: Austria, Britain, and Germany. The different legislative and electoral institutions in these countries cause variation in the objective costs of dissent, which should in turn affect the perceived costs of dissent and thus the value of dissent as a valence signal for voters. Austria, Britain, and Germany are suitable cases to study because the costs of dissent vary across the three countries due to the nature of the electoral systems and the forms of parliamentary and party organization. We argue that the costs of dissent are highest in Austria and lowest in Britain, and this should affect voter perceptions of and reactions to such behavior. Our conjoint analyses also include varying types of dissent and additional questions concerning the perceived costs of dissent to MPs and their
parties, allowing us to perform within-country tests of reactions to different types of dissent that vary in their cost to the legislator.

Our findings largely confirm our expectations. The effect of dissent on voter evaluations of an MP is greater on average in the German and Austrian samples. This finding holds even accounting for alternative explanations for these country differences, such as average levels of political interest, ideological extremism, or populist attitudes. Next, we find that, within each country sample, voters place more weight on dissent expressed by voting against the party line than on dissent expressed in the media, in parliament, or behind closed doors. In addition, we find that dissent by government MPs is given more weight than dissent by opposition MPs, perhaps because such disagreement is also more costly.

Our findings extend the relevance of the valence signalling theory of legislative behavior as costly signals (Campbell et al. 2019; Patty 2016; Patty et al. 2019). Voters weight signals differently depending on how well they provide information on incumbent valence, and this is related to the cost of sending these signals. The core contribution of this article is therefore that it provides the first individual-level and cross-national evidence of how the costliness of signals matters for voter evaluations of legislative behavior. In the conclusion, we reflect further on the substantive implications of our findings.

**Voters Infer Valence Characteristics from Dissent**

Recent research argues that dissent provides information to voters about an MP’s valence characteristics, which are attributes such as steadfastness or honesty that are valued by most individuals (Campbell et al. 2019; Mondak 1995; Stone and Simas 2010). Most voters want to elect candidates who are honest and trustworthy, but these qualities are not directly observable. When voters observe MPs publicly disagreeing with their party and incurring the attendant career costs, they may infer that these MPs are less concerned about their personal political ambitions and thus comparatively principled and trustworthy.

Given that dissent thus partly signals “valence”-type attributes that are valued by most individuals, we would expect at least part of the effect of MP dissent upon voter evaluations to be unconditionally positive. In fact, when voters hear that a parliamentarian has spoken out against his or her party, they may take from this mainly that the MP appears to be principled and remember
less about the policy-specific reasons that drove the MP to speak out. This may be because discerning policy-based signals requires more interest and attention, while disagreement with the party line is more easily registered. Campbell et al. (2019) indeed show that voters see dissent as a signal of personal qualities, even more than as a signal of policy positions. A similar argument is proposed by Carson et al. (2010), who show that voters in the United States value independence from the party per se rather than conditional on the specific policy positions signalled by independence.

A valence signalling account of dissent is consistent with the pronouncements that politicians make. When, for example, the British Conservative Party MP Philip Davies made the following claim about his political motivations in his first parliamentary speech, it was his subsequent record of frequent votes against the party line—and in particular the career costs he incurred through such dissent—that made the claim credible:

I have no desire to rise through the ranks … I wish to remain on the back benches and to speak up for the things that matter to me and my constituents. I want people to know that when I say something, I say it because I mean it, not because someone has told me to say it.

Similarly, when Labour Party Chief Whip Nick Brown MP was asked why current party leader Jeremy Corbyn—a particularly frequent dissenter when Brown held the Chief Whip role under previous Labour leaders—should be well-suited to running the party, he explicitly associated rebellion with being honest and principled:

I never once got him to change his mind when he was going to against the Labour government. … Strength of character and personal decency, you’re asking me what his strengths are, those are his strengths.

However, note that we do not assume that voters only infer valence when this is the intended signal of MPs. Parliamentarians dissent for a variety of reasons, including personal conviction, policy motivations, and to build up a personal vote through policy positioning or valence signalling (Proksch and Slapin 2015; Slapin et al. 2018). Below, we assume that voters often interpret dissent as a valence signal, regardless of whether the MP’s decision is in fact driven by policy, career, or electoral goals. One reason they should do so is because dissent can incur important costs to MPs.
The Role of Dissent Costs in Determining Voter Responses

Voters reward dissent because they believe such behavior contains information about important qualities of the MP. The potential costs the MP incurs are crucial because it is the willingness to incur costs that gives value to the signal and makes it a useful heuristic for voters. This also means that the extent to which dissent positively affects voters’ beliefs about the quality of an MP should depend on how much it costs the MP to dissent. The basic inference we envisage voters making is as follows: as the career costs that an MP incurs for dissent increase, an MP must care more about expressing his or her dissenting opinion—or less about diminished career prospects—in order to be willing to engage in dissent and pay these costs.

One can think about this in terms of the logic of a signalling game (e.g., Spence 1973). In the game, voter pay-offs are based on the quality of the representative they choose in the next election, with quality defined as a continuous parameter that varies according to some probability distribution across MPs. The challenge for voters is that they cannot directly observe the quality of their incumbent MP. They only observe whether or not the MP dissents from his or her party. Hence, the signal in this case is whether an MP dissents from the party line. This makes an MP the signal “sender” and the voter the signal “receiver.”

An important additional aspect of the game is that all MPs pay some baseline cost $k$ for dissent. However, there is an additional cost increment that varies according to the quality of the MP: lower-quality MPs pay a larger cost increment than higher-quality MPs. This could be because lower-quality MPs are more concerned about progressing in their parliamentary career or because they experience lower expressive benefits from speaking their mind.6

According to the valence signalling account of legislative dissent, there is a semiseparating equilibrium where (1) only those MPs whose quality is above a certain threshold $q^*(k)$ will dissent and (2) voters grant such MPs an electoral bonus, provided the baseline cost of dissent $k$ is high enough and MPs value re-election sufficiently. The logic is that MPs below the quality threshold are deterred from “mimicking” the higher-quality MPs by dissenting because the costs for them outweigh the electoral benefits. It is crucial that in this equilibrium voters will (correctly) believe that MPs who dissent despite the costs of doing so have a higher average

---

6 Markus Wagner, Nick Vivyan, and Konstantin Glintzer
quality (in terms of honesty and/or strength of principles) than those who do not. In other words, dissent helps voters distinguish between MPs based on quality.

What happens when the baseline cost of dissent (relative to the benefits of re-election) across MPs increases? If costs increase from some value $k_1$ to a higher-value $k_2$, this will lead to an increase in the quality threshold at which MPs dissent. Of those MPs who would previously have dissented, some of the lower-quality ones now find it too costly to do so. Thus, fewer MPs engage in dissent when this becomes more costly. More importantly, this means that voters can also (correctly) infer that the average quality of those MPs who do dissent is now higher. Furthermore, provided the PDF of the distribution of MP quality is strictly declining between $q^*(k_1)$ and $q^*(k_2)$, voters will infer that the difference in the average quality of MPs who do and do not dissent has also increased. Hence, if voters understand that MPs’ willingness to bear the costs of dissent contains information about their character, then the extent of these costs should matter to voters, too.

How the Costs of Dissent Vary

In this section, we consider how the cost of dissent $k$ varies, as this should matter for how voters evaluate MP behavior. Here, we consider two determinants of the cost of legislator dissent: the country-level institutional setting and the type of dissent. Variation in these determinants of the costs of dissent should influence the effect of dissent on voter evaluations of an MP.

First, the cost of dissent varies by institutional setting. The fundamental mechanism driving this variation is whether there are incentives for parties to allow some amount of personal vote seeking by MPs (Proksch and Slapin 2015). Hence, parliamentary systems differ in the electoral incentives for MPs to voice disagreement, as well as in whether parties tend to impose costs on such dissenting MPs (Kam 2009). Parties can sometimes benefit from the individual appeal that MPs can generate by taking distinct positions (Proksch and Slapin 2015). This is largely the case in electoral systems where MPs can build up a personal vote (Carey and Shugart 1995). Parties work harder to protect the integrity of their label or brand in closed-list PR systems than in majoritarian single-member-district systems (Proksch and Slapin 2015, 25). We can therefore distinguish systems where parties may benefit from the independent appeal of MPs—e.g., single-member or open-list
proportional districts—from parliamentary systems with singletier, closed-list proportional representation, where MPs’ unique appeal has few benefits as voters choose between parties not candidates. The costs of dissent are higher when parties have no incentive to allow for personal vote seeking. MPs may nevertheless choose dissent due to personal conviction, policy motivations, or because they think they may not be punished.

If parties do want to induce their MPs to remain loyal by imposing painful costs on them, the extent to which parties can do so also depends on institutional characteristics such as the electoral system, parliamentary institutions, and candidate-selection mechanisms (Carey and Shugart 1995; Kam 2009). These institutions determine party leaders’ repertoire of sanctions and rewards that can be used to induce MP loyalty. Specifically, parliamentary institutions determine the extent to which parties can promise ministerial appointment and provide MPs with office benefits (Benedetto and Hix 2007; Cox 1987; Kam 2009). As Benedetto and Hix (2007, 760) note, these carrots and sticks will also influence the decision calculus of MPs who are mainly interested in policy, since jobs as minister, posts as committee chairpersons, or indeed a seat in parliament will allow such MPs to realize policy goals (Kam 2009).

In general, the relevant institutional patterns are therefore as follows. At one extreme, with high costs of dissent to MPs, lie closed-list proportional systems, especially if they also have weak committees and leader-controlled candidate selection. At the other extreme, with low costs to MPs, are single-member districts, particularly if coupled with strong committees and constituency-controlled candidate selection. As a result, the costs of dissent in some parliamentary systems are generally higher than in other systems. Overall, these institutional differences generate variations in the “baseline” system-level costs of dissent, which in turn determine the quality of the valence signal of dissent for voters in each system.

Of course, these differences need to be noted by voters, even if imperfectly and with significant interpersonal variation. This would mean that the overall perceived costs of dissent should be higher in some systems than in others, in line with the actual costs of dissent in these systems. We test this empirically in our surveys in Austria, Britain, and Germany. As a result, we expect that in systems that impose higher costs on dissenting MPs, voters will recognize that there is a higher-quality threshold for dissent and
Costly signals

will therefore update their beliefs about MP quality more drastically when dissent is observed.

Thus, our first hypothesis is:

**H1:** The more costly dissent is to MPs in a political system, the greater the positive effect of dissent on voter evaluations of an MP.

The second source of variation in the costs of dissent relates to different types of dissent within each country. As Proksch and Slapin (2015) point out, while most existing research focuses on voting against the party line as the primary way of measuring legislator independence, MPs might use different means to express their dissatisfaction with the party line. Drawing on Proksch and Slapin (2015, 24–28), we can think of four ways that MPs can express dissent: (1) verbally at internal party meetings, (2) verbally in the media, (3) verbally in parliamentary debates (which voters usually observe only indirectly via media coverage), and (4) by voting against the party in the parliament.11

Of these four types of dissent, we assume that expressed verbally at internal party meetings (type 1) is the least costly for an MP. For example, Crowe (1983) surveys members of party leadership in the UK House of Commons about different types of dissent and finds that they tend not to consider internal dissent a serious breach of discipline. Cowley’s (2002) interviews with parliamentarians also suggest that party leaders see the facilitation of private backbench dissent (and potentially policy concessions in response to such dissent) as a useful party-management tactic. We also assume that dissent expressed via voting against the party in parliament (type 4) is the most costly form of dissent. This is consistent with Proksch and Slapin’s (2015) argument and with Crowe’s (1983) finding that members of party leadership in the United Kingdom consider this the most serious breach of discipline. The costs entailed by the remaining two types of dissent—verbal dissent in the media (type 2) and in parliamentary debates (type 3)—are assumed to lie in between these two extremes, again consistent with the views expressed by party leaders in Crowe (1983) and with Proksch and Slapin (2015). However, while Crewe finds that media dissent is considered by party leaders to be a more serious breach of discipline than dissent in parliamentary debates, Proksch and Slapin argue that dissent in debates is likely to be more
costly because MPs can more easily refute or backtrack on media statements than those made on the parliamentary record (2015, 27). Which of these final two types of dissent incurs a higher cost for an MP is therefore subject to disagreement.

To the extent that voters perceive the relative costs of these different types of dissent, and if they treat more costly forms of dissent as a stronger signal, we can form testable expectations. First, because both verbal and vote dissent entail positive cost to the MP—and therefore engaging in both types of dissent is more costly overall than engaging in just verbal dissent—one would expect MPs who engage in both types of dissent to be evaluated more positively than MPs who only engage in verbal dissent:¹²

\[ H2a: \] The combined impact of verbal and vote dissent on voter evaluations of an MP is greater than that of verbal dissent alone.

Second, given the relative costs of different verbal types of dissent above, we expect that:

\[ H2b: \] Verbal dissent in parliamentary debates and verbal dissent in the media both have a greater impact on voter evaluations of an MP than internal dissent.

**Experimental Design**

We use a conjoint analysis survey experiment to examine voter reactions to MP dissent (Hainmueller, Hopkins, and Yamamoto 2014). In such experiments, participants are presented with two or more choices that vary randomly on a set of attributes and are asked to rate or choose between these options. Here, we ask respondents to rate pairs of hypothetical Members of Parliament whose dissent behavior varies randomly.

We use an experimental design for two reasons. First, it allows us to ensure that all respondents are provided with the same facts about MP behavior, so there will be no nonexperimental heterogeneity in information. For instance, it may be that dissent generates profile effects, so that rebellious MPs are better known than other MPs and receive an electoral benefit from this (Kam 2009). Such heterogeneity could easily hinder inferences in observational data. Second, we can ensure that dissent is exogenous, so that it is not
related to other attributes of the MP or of the political system. In a real-world setting, MP dissent behavior may be correlated with many other aspects (Benedetto and Hix 2007; Kam 2009), again preventing accurate inferences from the data.

We conducted three population-based conjoint analysis survey experiments (Hainmueller, Hopkins, and Yamamoto 2014), one each in Germany, Austria, and Britain. We use this approach for two reasons. First, it allows us to benchmark the effects of dissent in the context of other MP attributes (such as party affiliation or gender). Second, we include three attributes that are particularly important because they describe characteristics that may be associated with (or “aliased by”) dissent in the minds of voters: party affiliation, political ideology, and constituency focus. In a traditional split-sample survey experiment where the above dissent treatment is the only MP attribute that is randomized, it would be difficult to identify whether respondents react to dissent as a signal of quality or whether they make inferences about other characteristics of MPs based on their dissent (Hainmueller, Hopkins, and Yamamoto 2014). Therefore, in the conjoint analysis vignettes, we also include information regarding these other MP attributes.

The surveys were run with Survey Sampling International in March 2017. Each survey had around 2,000 respondents. These were chosen from the online access panels run by SSI or its international partners. Quotas were implemented so that respondents would be representative of the population in terms of age, gender, and region. More details on the representativeness of the samples can be found in Appendix F in the online supporting information. In each country, we weight the sample based on the joint distributions of age, gender, and region.

Before we turn to describing our experiment in detail, we discuss our three country cases— Britain, Germany, and Austria—and how they vary in terms of system-level costs of dissent.

**Costs of Dissent in Austria, Britain, and Germany**

Here, we briefly outline the electoral and parliamentary systems of Britain, Germany, and Austria and how they may affect the costs of dissent for MPs. Recent research shows that dissent occurs more frequently in Britain than in Germany and Austria (Little and Farrell 2017). One reason for this may be differences in the costs of dissent in each system. For each country, we first focus on the extent to which parties are likely to allow MPs to seek
We start where the costs of dissent are lowest: Britain. The House of Commons is elected using single-member districts, which allows for relatively strong personal vote seeking (Carey and Shugart 1995; Proksch and Slapin 2015). Although voting behavior in Britain is party centered, some citizens might consider casting a personal vote (Cain, Ferejohn, and Fiorina 1987)—and, as various scholars argue, they have increasingly been doing so over the last decades (Eggers 2014; Vivyan, Wagner, and Tarlov 2012). This means that both parties and MPs have an incentive to create a level of name recognition and valence reputation in each constituency (Proksch and Slapin 2015). Some party mavericks may be particularly hard to punish by parties if they have significant popularity (Tavits 2009). Hence, the costs of dissent to MPs are rather moderate in Britain because parties have a modest incentive to allow MPs to seek a personal vote.

The costs of dissent should be higher in Germany than in Britain. The Bundestag is elected via a two-tier, mixed-member proportional electoral system. German voters cast two votes: a candidate ballot for a district candidate (“Erststimme”) and a party-list ballot for a party (“Zweitstimme”). Voters are allowed to split their vote. The overall share of party seats in the Bundestag is proportional to the overall vote share of each party on the party-list ballot (for more details, see Saalfeld 2005). Due to the combination of majoritarian and proportional elements, German MPs have a small incentive to build up a personal vote, which may even lead parties to reward dissent on occasion (Crisp et al. 2013). However, parties have little reason to foster personal vote seeking since the distribution of seats is determined by the party-list vote (Proksch and Slapin 2015). Because parties have few incentives to allow MPs to seek a personal vote, the costs of dissent to MPs are potentially large in Germany, though parties do not always make use of these powers (Kauder, Potrafke, and Riem 2017).

Finally, the costs of dissent are likely to be highest in Austria. Austria employs a three-tier proportional electoral system that has a weak flexible list component (Müller 2005; Shugart 2005). Specifically, citizens have the possibility to affect the party-list ranking in each tier by casting a preferential vote within their party of choice. However, the number of votes needed to reorder the list is very large, so that very few candidates have ever been successful in gaining enough votes to reorder the list. One example is
that of Josef Cap, a social democratic politician who criticized the party openly, was given a low ranking on the party list, and only made it into parliament via preference votes. Such cases are very rare, and more often dissenters are summarily deselected or moved down the list and fail to win re-election. Hence, the incentives for personal vote seeking are therefore low, and dissent should therefore be relatively costly for an MP in Austria.

Of course, the three countries also differ in other important institutional arrangements relevant for the costs of dissent. One particularly relevant arrangement is candidate-selection procedures. In Britain, candidate selection, while dominated by the national party (Lundell 2004), is often partially determined at the constituency level (Hopkin 2001), making independence less costly to MPs in terms of re-election chances. Candidate selection in Germany is rather centralized at the regional level, especially for the party list (Bille 2001, 138; Hazan and Rahat 2010), although candidate selection for district seats is highly decentralized. In Austria, candidate selection is relatively centralized at the regional level (Bille 2001; Hazan and Rahat 2010; Lundell 2004), meaning re-election chances are almost entirely in the hands of regional party elite. Hence, candidate-selection procedures also point to a similar country ordering (United Kingdom-Germany-Austria) in terms of costs, but the pattern is less stark than in terms of personal vote seeking.

Also relevant for the costs of dissent is the extent to which institutional arrangements within legislatures allow party leaders to control MPs’ parliamentary career advancement and therefore to condition this advancement on loyalty (Sieberer 2006). Here the cross-national differences are less clear cut. On the one hand, the United Kingdom has more ministerial posts than Germany or Austria and a higher rate of parliamentarians are generally appointed to those posts (De Winter 1995). Thus, the costs of dissent to an MP in terms of foregone opportunities for ministerial promotion may be greater in the United Kingdom. On the other hand, the lower houses of the German and Austrian parliaments have relatively powerful legislative committees (Sieberer 2011) and appointment to these committees is largely in the hands of party leaders (Damgaard 1995), whereas appointments to the most powerful and prestigious parliamentary committees in the UK parliament (select committees, which focus on nonlegislative oversight) are made by secret ballot and therefore not controlled by party leaders (Fisher 2015).
Overall, taking the lack of clear country-level differences in dissent costs due to parliamentary career incentives together with the clear country-level differences in the dissent costs implied by electoral-system incentives and candidate-selection rules, we assume dissent costs to be on average lowest in the United Kingdom, higher in Germany, and highest in Austria.

Vignette Design: Politician Attributes

Figure 1 shows a screen-shot of our conjoint experiment. Below, we present in detail the attribute levels for each MP attribute, as well as the logic behind these design decisions.

To measure party loyalty, we tell respondents whether a politician tends to criticize and vote against his or her party. We do not

FIGURE 1
Screen-Shot of Conjoint Design (in Britain)

Scenario 1 of 5:
Please carefully read the following information about two hypothetical Members of Parliament (MP 1 and MP 2) and then answer the question below.

MP 1 worked in the public sector as a teacher before becoming an MP. Her father worked as an insurance sales agent and her mother as a nurse. She grew up and lives in the West Midlands. She is a Conservative MP, generally considered to be a moderate in the party. Her main focus as an MP is to develop national policies in parliament. On policy matters she sometimes criticises her party in parliamentary debates, but hardly ever votes against her party.

MP 2 worked in the private sector as a journalist before becoming an MP. His father worked as a policeman and his mother as a nurse. He grew up and lives in the West Midlands. He is a Labour MP, generally considered to be a moderate in the party. His main focus as an MP is to address problems in your local area. On policy matters he sometimes criticises his party at internal party meetings and then votes against his party.

How happy would you be to have MP 1 or MP 2 as your MP?

Very unhappy

1  2  3  4  5  6  7  Very happy

MP 1

MP 2
Costly signals

mention a specific policy area and focus instead on MPs’ general behavior, which can often lead to important public reputations as “rebellious” or “outspoken” MPs. However, we also include MP ideology in our vignette (see below), so respondents could at least infer the likely direction of dissent.\textsuperscript{15}

MPs could either “never” or “sometimes” criticize their party. Among MPs who sometimes criticize the party, such dissent was either expressed at internal party meetings, in parliamentary debates, or in the media and was either “always” or “hardly ever” accompanied by a vote against the party line. We formulated voting as an additional form of dissent as Proksch and Slapin (2015) argue that forms of dissent are cumulative, so that voting against the party almost by necessity includes public dissent in the media or in parliament. The possible attribute levels are presented in Table 1. Note that for some analyses, we collapse the three types of verbal dissent (internal, in debates, and in the media). In addition, we do not allow for vote-only dissent since this is rarely a plausible course of action for MPs.

<table>
<thead>
<tr>
<th>Type of Dissent</th>
<th>Votes Against Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>He/she never criticizes his/her party.</td>
</tr>
<tr>
<td>Internal Meetings</td>
<td>He/she sometimes criticizes his/her party at internal party meetings, but hardly ever votes against his/her party.</td>
</tr>
<tr>
<td>Debates</td>
<td>He/she sometimes criticizes his/her party in parliamentary debates, but hardly ever votes against his/her party.</td>
</tr>
<tr>
<td>Media</td>
<td>He/she sometimes criticizes his/her party in the media, but hardly ever votes against his/her party.</td>
</tr>
</tbody>
</table>
Other Attributes

The loyalty-dissent attribute is the key feature of our conjoint analysis experiment. However, we also vary other attributes, focusing in particular on those that may be associated with dissent.

Party affiliation and political ideology. Voters might associate certain dissent behavior with the party affiliation and political ideology of politicians. For instance, they might think that dissenting MPs are part of the government. We therefore randomized information about the MPs’ party. People might also believe that MPs dissenting from a social democratic party are to the left of their party and that MPs dissenting from a center-right party are to the right of their party. We therefore also included explicit information about ideology, thereby accounting for this type of association made by voters. By including ideology, we can also test whether the effects of dissent are conditional on policy views.

In Britain, politicians were affiliated with the Labour or the Conservative Party; in Germany with SPD or CDU/CSU, and in Austria with SPÖ, ÖVP, or FPÖ. We then also indicated whether the politician is from the moderate wing of a party or from the right wing (right-wing parties) or the left wing (left-wing parties). Hence, for the Conservatives and the CDU, ÖVP, and FPÖ, MPs could either be right wing or moderate; for Labour, SPD, and SPÖ, the MPs could either be left wing or moderate. Given these statements of an MP’s intraparty ideological leaning, respondents are able to make inferences about the ideological content of dissent they observe: when MPs on the left (right) wing of a left (right) party dissent, this is likely to be dissent against moderate party positions; when moderate MPs dissent from either a left or right party, this is likely to be dissent against more extreme ideological party positions.

Work focus. Since voters might think that dissenting MPs are more oriented towards constituency service, and voters value such service (Vivyan and Wagner 2016), it is important to account for actual constituency service in the vignette. We therefore included information on whether a politician focuses predominantly on developing national policies or on addressing local problems.
Other attributes help to flesh out the vignettes. These attributes are gender (male or female); regional background; parents’ occupation; and prior work experience.

In each country, we stated at the beginning of the experiment that all MPs were elected at the last election. In Germany, we also informed respondents that MPs were elected via the constituency vote; in Austria, we told respondents that MPs were elected in the lowest electoral tier.

We asked respondents to rate two hypothetical politicians on a 1–7 feeling scale, indicating their general preference towards each politician. Respondents had to perform five comparisons in total. We opted for a paired rating task, following the validation analysis of Hainmueller, Hangartner, and Yamamoto (2015), which shows that ratings of vignette pairs provide more valid assessments than choices and single-vignette ratings. To avoid primacy or recency effects, we randomized the order of attributes to some extent: we varied the order in which the three sets of attributes (party affiliation and ideology; parents’ and own occupation; and regional background, work focus and party loyalty) appeared. These three blocks were randomized across respondents.

Perceptions of the Cost of Dissent

Our expectations are built on the assumption that voters to some extent understand differences in the cost of dissent to MPs. We tested this empirically in our surveys.

One way of thinking about the perceived costs of dissent is asking how often voters think that MPs dissent from their party, under the assumption that the perceived costs are lower if this dissent is frequent. We therefore asked: “How often do you think that MPs in Great Britain disagree with their party publicly (e.g., in the media or during a parliamentary debate)?” and “How often do you think that MPs vote against their party in parliament?” The response scale was “often,” “sometimes,” “rarely,” or “never.” Based on these questions, Figure 2 presents the perceptions of costs of dissent in Germany, Austria, and Britain. The figure shows that Germans and Austrians believe that MPs vote against and disagree publicly with their party less often than British respondents. The effects are about 0.2 (disagreement) and 0.4 (voting), measured on a 1–4 scale. The standard deviations for both variables are about 0.8, so these differences are substantial.
Figure 2
Country-Level Differences in the Perceived Frequency and Costs of Dissent

Note. This plot shows the differences in perceived frequency and costs of dissent in Austria and Germany compared to Britain. Coefficients are from OLS regressions with indicator variables for Germany and Austria. The points without horizontal bars denote Britain, the reference category. The statements measuring the perceived frequency were: “How often do you think that MPs in [the United Kingdom, Austria, Germany] disagree with their party publicly (e.g., in the media or during a parliamentary debate)?” and “How often do you think that MPs vote against their party in parliament?” The response scale was: “often,” “sometimes,” “rarely,” or “never,” recoded here to a 0–3 scale. Costs of dissent were asked with the following question: “MPs who openly criticize their party are punished by the party leadership (e.g., they are no longer nominated).” Respondents could answer on a 5-point Likert agree-disagree scale (recoded to a 0 to 4 scale). No “don’t know” option was provided for the three questions.
We also measured voters’ perceptions of the costs of dissent in our surveys. We asked respondents how much they agreed with the following statement: “MPs who openly criticize their party are punished by the party leadership (e.g., they are no longer nominated).” Respondents could answer on a 5-point Likert agree-disagree scale. Based on this question, Figure 2 shows voters in Germany and Austria think that dissent is more costly than British respondents. On average, the responses of Germans and Austrians are 0.1 to 0.2 units higher than in Britain, a difference that is statistically significant. Given that the standard deviation of this variable is about 0.9, the cross-national differences are moderate.

Overall, we have clear evidence that voters do notice that the costs of rebellion are higher in Germany and Austria than in Britain. It is also consistent with expectations that the costs are perceived to be higher in Austria than in Germany, given that the single-member-district element of MMP systems provides parties with some incentive to allow for MP independence (Proksch and Slapin 2015).

To our knowledge, this is the first survey that shows that there are differences in the perceived costs and frequency of dissent across countries. These findings also provide an important foundation to our analysis below, which assumes that such differences in perceptions are present.

**Cross-Country Variation in Reactions to Dissent**

Now, we turn to the analysis of the conjoint analysis experiment. These yield 10 observed MP ratings per respondent, one for each of two MPs in each of five choice tasks. We treat these observed MP ratings as our units of analysis and estimate ordinary least square regressions where the dependent variable is the observed rating score (measured on a 1 to 7 scale), and the predictor variables are a series of indicators for each level of each MP attribute in the experiment. The coefficient on each of these indicators represents the estimated average marginal component effect (AMCE) of a particular level of an MP attribute on MP ratings, averaging over the levels of all remaining attributes (Hainmueller, Hopkins, and Yamamoto 2014). Standard errors are clustered by respondent. The initial results in Figure 3 collapse the three types of verbal dissent (in internal meetings, in debates, and in the media). Hence, we compare MPs who do not dissent to MPs who dissent verbally and vote against the party (top section) and MPs
who dissent verbally but hardly ever vote against the party (bottom section).

In line with Hypothesis 1, Figure 3 shows that the effects of dissent are much higher in Germany and Austria than in Britain. The effect of verbal dissent without vote dissent is significant and on average adds between 0.2 and 0.3 points to a voter’s evaluation of an MP in Germany and Austria, whereas the effect is close

**FIGURE 3**
Country-Level Differences in Reactions to Dissent

Note. This plot shows estimated AMCEs of the randomly assigned MP dissent attribute on MP ratings for Britain (N = 1,988), Germany (N = 1,992), and Austria (N = 2,164). Dissent behavior has three categories with “no dissent” as the reference category. MP ratings are measured on a 7-point scale (from 1 [very unhappy] to 7 [very happy]). Estimates are based on an OLS regression with clustered standard errors. Sociodemographic weights were applied. Horizontal bars represent 95% confidence intervals. Surveys were carried out by SSI in March 2017.
to zero and nonsignificant in Britain. The effect of verbal dissent coupled with vote dissent is significant and positive across all countries, but it is around 0.4 points higher in Germany and Austria than in Britain.

In terms of magnitude, the effects of dissent in the German and Austrian samples are substantial. In fact, the effects of verbal plus voting dissent are among the largest of any of the MP attributes included in the experiment (see Appendix A in the online supporting information). The strongest effect is for the party affiliation of the MP, which we include in our regression as the sympathy of the respondent for the party of the MP. Dissent is generally the second or third most relevant attribute for respondents. Dissent thus always has a bigger impact than class roots, occupation, regional background, or gender. In the United Kingdom, only party affiliation and constituency work focus have a stronger effect than voting against the party. Hence, the effects of dissent stand out from other attributes, particularly in Germany and Austria.

In sum, there is a clear difference between Britain on the one hand and Germany and Austria on the other, with dissent rewarded much more in the latter two countries. However, we also suggested that the perceived costs of dissent are higher in Austria than in Germany. Yet we do not find that Austrian respondents react more positively to dissent than German respondents. We do not have an explanation for this, but it may be that both countries have similar electoral systems and similar levels of party discipline, so that differences between the two countries are not as large as the perceptions in Figure 2 would suggest.

In Appendix B in the online supporting information, we also examine whether the dissent attributes interact with party identification and voter ideology. For example, supporters of a party might respond more positively to dissent from outside their preferred party and from MPs close to their own ideological views (Campbell et al. 2019). In all three countries, we see that ingroup dissent has weaker effects than outgroup dissent (Figure B2). Note that this contrasts with the assumption in Slapin et al. (2018) that dissent is mainly aimed at extreme own-party voters. At the same time, the relative effects of dissent across countries is the same, no matter whether respondents assess in- or outgroup MPs. Appendix B also includes results that show that voter-level ideology does not explain away reactions to dissent (Figure B3).
Alternative Explanations

Our analysis of cross-national differences in the perceived costs of dissent (see Figure 2) lends plausibility to the argument that these average country-level differences in voter reactions to MP dissent are driven by country-level differences in the costs of dissent. However, there are, of course, other differences between these countries that might drive our results. We therefore also test the robustness of our findings to alternative explanations.

First, it may be that voters in Austria and Germany differ in other ways from voters in Britain and that this drives differences in reactions to dissent. For instance, it may be that Austrian and German voters are on average more populist, ideologically extreme, or politically interested than voters in Britain. Such voters may react more positively to dissent: populist voters may endorse the antiestablishment implications of dissent; ideologically extreme voters may endorse dissent, especially if this matches their preferences (although see Appendix B in the online supporting information); and politically interested voters may be better at understanding the political costs of dissent. Hence, if countries differ in their average populism, extremism, or political interest, this may also explain cross-country differences in reactions to dissent.

In our surveys, there are indeed differences in average political interest, populism, and ideological extremism between the three countries. In particular, voters in Germany and Austria are on average more extreme, more populist, and more politically interested than voters in Britain (see Figures C1 and C2 in the online supporting information). These differences could therefore conceivably explain why these voters on average react more positively to dissent. However, further analyses that control for these factors (and their interaction with MP dissent) still show stable and significant country-level differences in reactions to dissent. Overall, accounting for these alternative explanations therefore does not weaken our country-level finding (see Figure C3).

Another possibility is that voters react to dissent differently conditional on the policy view it signals and that the strength of these effects varies cross-nationally. For example, it may be that voters in Germany and Austria care more about the policy content of dissent signals than British voters. The first part of this alternative explanation is that the policy content of dissent matters, which is indeed the case. Voters do react to whether MPs are centrist or extreme, and this effect is conditional on the voter’s own
Costly signals

self-reported left-right ideological position and is indeed clearer in Austria and Germany (Figures B5 to B8 in the online supporting information). However, across subgroups based on ideological congruence, voters in Austria and Germany tend to reward dissent more than voters in the United Kingdom. Hence, this alternative explanation for our cross-country differences fails to hold.

Overall, our cross-country differences in reactions to dissent remain even when accounting for key alternative explanations. Hence, it is likely that variation in the perceived costs of dissent can explain these differences. However, further evidence of our signal cost theory can also be provided by within-country analyses, to which we now turn.

**Within-Country Variation in Reactions to Dissent**

Next, we test the expectation that there is a hierarchy of voter reactions in terms of the types of dissent MPs engage in. To examine this, we disaggregate the effects for dissent based on whether this was expressed internally, in the media, or in parliamentary debates. Figure 4 present these effects for the United Kingdom, Germany, and Austria. As in Figure 3, the effects of any given type of dissent are generally larger in Germany and Austria than in Britain. Consistent with Hypothesis 2a, in all country samples we find that voter evaluations of an MP increase significantly more when an MP dissents both verbally and by voting against his or her party than when an MP dissents mainly verbally. We take this as evidence that voters value the additional costs MPs incur by voting against their party.25 Overall, our results indicate that the political context of dissent within each country also matters for dissent evaluations.

However, Hypothesis 2b is not confirmed: across all three countries, respondents do not differentiate between dissent in the media or in debates versus verbal dissent in internal meetings. This nonfinding could imply that voters perceive these different types of verbal dissent as equally costly and thus ignore this variation in their assessment of MPs or that voters do not react to more nuanced variation in dissent costs. Overall, we nonetheless find strong evidence that whether an MP dissents matters to voters, particularly if dissent is backed up by voting against a party.

Finally, in an exploratory analysis, we also consider an additional within-country variation in costs, specifically between government and opposition MPs. It is arguably more costly for
government MPs to dissent from their party, as this endangers policymaking and government stability more than disunity among the opposition. Moreover, Slapin et al. (2018) argue that dissent is a more effective tool for communicating policy positions for government MPs. Hence, it may be that voters react more to rebellion among government MPs than among opposition MPs.

At the time of the surveys, Austria and Germany had “grand” center-left–center-right coalitions, while the United Kingdom was governed by the Conservatives. We can thus examine the potential moderating effect of government participation by comparing...
Labour MPs in Britain and FPÖ MPs in Austria to other MPs. (In Germany, all potential MPs were in the government.) One limitation of our research design is that being in government was not randomly assigned in our experiment: the effects we find are differences between MP parties and may thus stem from other sources as well.

We find that reactions to dissent are indeed statistically significantly higher for governing parties (see Figure B1 in the online supporting information). Note that while rebellion is valued more for Conservative than for Labour MPs in Britain, positive reactions are still lower than in Germany or in Austria, so this finding does not affect our conclusion concerning the country-level results testing Hypothesis 1.26

Conclusion

When it comes to evaluating politicians and government, not all signals these actors send to voters are equally useful. One way in which voters decide how much weight to place on signals is by taking into account the costs incurred in sending them: the more costly the signal, the more likely it is to contain worthwhile information. In this article, we applied this framework to explaining cross-national differences in evaluations of dissent, focusing in particular on the fact that disagreement with the party line may also be seen as containing valence-type information about the legislator’s integrity and trustworthiness.

In studying the effects of dissent as a costly valence signal, we show how reactions to dissent vary between institutional settings and between types of dissent. Our empirical analysis of voter perceptions in Britain, Germany, and Austria lends support to our theoretical framework: the potential rewards for dissent are higher where the costs to MPs are higher (i.e., in Germany and Austria) compared to where they are lower (i.e., in Britain). However, reactions in Germany and Austria were similar, even though the perceived costs of dissent are higher in the latter, which could be due to the fact that the institutional set-up in both countries is nevertheless similar. Within each country, the rewards are also higher when the type of dissenting act is particularly costly, that is, for voting against the party compared to merely speaking out publicly.

The fact that variation in signalling costs is associated with variation in reward for dissent provides further support for valence signalling theories of parliamentary behavior. One caveat is that
we examine overall assessments of MPs, so we do not test directly whether dissent increases perceptions of competence, resolve, or trustworthiness. Hence, the mechanism of valence signalling could be unpacked further, and this could be a useful avenue for future research.

Our findings reveal an important and consequential irony about the work of MPs in parliamentary systems. Voters value dissent more in those contexts where the personal vote is less relevant, that is, where MPs have less to gain by building up a personal reputation among constituents and where they will be punished more severely for dissent. The relative ease of dissent in Britain appears to devalue this signal among voters. In contrast, the barriers to voicing disagreement in Germany and Austria are high, so that this action still carries a lot of meaning for voters. In systems where the personal reputations of MPs are most useful electorally, these reputations are most difficult to construct because voters discount the value of the signals sent. Hence, our research shows how difficult it may be for MPs to construct a personal vote precisely in those systems that encourage one.

More broadly, our argument and our findings imply that voters react to the institutional differences that generate signalling costs. With the exception of Doherty (2013), researchers have often been skeptical of the extent to which voters are aware of institutional differences, for instance, in terms of attributing responsibility for economic developments (Achen and Bartels 2016; Rudolph 2006). Our results show that voters do react to important differences in cross-national institutional arrangements. Hence, institutions matter not just for how MPs and parties act, but they also help to determine how voters evaluate that behavior. Our findings also relate to the literature on “clarity of responsibility” in economic voting (Duch and Stevenson 2008; Häusermann, Kurer, and Schwander 2016; Powell and Whitten 1993), which shows that the competency signal generated by the economy is more muted when responsibility is shared between actors. However, this research does not consider the costs of signals to the actors evaluated nor how institutions affect these costs. Overall, we argue that signal costs as well as the impact of institutions on these costs create key implications for how voters evaluate political actors.

Although we do not explicitly test this here, our findings are also of relevance for theories that treat legislator dissent as a signal of ideological position (Carey 2007; Kam 2009; Sieberer 2006; Slapin et al. 2018), for they suggest that an MP’s legislative actions
may have more effect on constituents’ beliefs about the MP’s ideology when such actions are more costly. Future research could test this by including more explicit information about the policy positions MPs take when dissenting on particular votes.

Concerning types of dissent, we do not find quite the strong pattern as depicted by Proksch and Slapin (2015, 26), where different levels of intraparty disagreement manifest themselves in turn in internal dissent, media dissent, parliamentary speeches, and voting. Instead, in the eyes of voters, voting is distinct from other types of dissent. However, there is still the possibility that parties accurately understand which types of dissent are picked up most by the media and therefore become known to voters. In our experiment, we provided voters with equal amounts of information for each type of dissent. In addition, it is possible to frame dissent in different ways, for example, as a welcome spirit of independence or as a treacherous willingness to betray one’s party. Our neutral descriptions could not capture these real-world complexities, but these should be studied further.

Markus Wagner <markus.wagner@univie.ac.at> is a Professor in the Department of Government at the University of Vienna, Rathausstrasse 19/1/9, 1010 Vienna, Austria. Nick Vivyan is a Professor of Politics in the School of Government and International Affairs, Durham University, Al-Qasimi Building, Elvet Hill Road, Durham DH1 3TU, UK. Konstantin Glinitzer received his PhD in Political Science in the Department of Government at the University of Vienna, Rathausstrasse 19/1/9, 1010 Vienna, Austria.

NOTES

1. Note that we define valence as positive, nonideological candidate characteristics (Stone and Simas 2010), and not as the ability to deliver universally endorsed goals (Clarke et al. 2011).

2. One partial exception is Doherty (2013), who shows that voters in the United States interpret legislators’ congressional voting behavior in ways that take into account their institutional incentives to favor their own district.

3. In related research, Patty et al. (2019) find evidence that when party leaders appoint an ideologically divergent legislator from their party to an important legislative committee—an act that is costly from the perspective of the party leader—voters interpret this as a signal of the legislator’s valence.
4. This theory of “costly signalling,” which was developed independently in evolutionary biology and in economics (Gambetta 2009; Spence 1973), has entered political science in different areas: Lupia (1992) highlights the role of cost in providing information to voters, and Fearon (1994) discusses costly signalling in international relations. Recent research examines how other aspects of legislative behavior can be used to signal valence: Patty’s (2016) formal model suggests that one reason legislators may engage in costly policy obstruction is because it enables them to signal their character to constituents.


6. A further complicating factor, which we disregard here, is that not all MPs may be punished for dissent (Kauder, Potrafke, and Riem 2017), while some may even be rewarded in open-list systems (Crisp et al. 2013; Tavits 2009). However, dissent is at least likely to increase the probability of costs. Here, we assume that all MPs incur costs, for the sake of simplicity.

7. Once $k$ gets too large relative to the benefits of re-election, all MPs are deterred from engaging in dissent, and voters can no longer infer quality based on dissent. Similarly, if $k$ is too low, even the lowest-quality politicians can afford to cast dissenting votes, meaning that voters can no longer infer quality based on dissent.

8. How restrictive is the condition that the PDF of the distribution of MP quality is declining between $q^*(k_1)$ and $q^*(k_2)$? When the distribution of MP quality is unimodal, then this condition implies that the initial equilibrium threshold $q^*(k_1)$ lies above the mode. This condition is, we argue, likely to hold in the empirical applications in which we are interested, given that the modal behavior of MPs in each of the political systems that we study is not to dissent.

9. We only focus on parliamentary systems here; incentives for personal vote seeking in presidential systems with divided powers are also strong.

10. Note that we focus on between-system differences in costs. However, costs will also differ within systems, as some parties will have more means to discipline dissenters than others—for example, due to candidate-selection mechanisms (Proksch and Slapin 2015). The ability of parties to exact punishment may also vary over time, for example, as party organization changes.

11. An additional, and usually irreversible, form of dissent is party switching, which is also viewed positively by voters (McAndrews et al. forthcoming).

12. We focus on verbal plus vote dissent versus verbal dissent alone because vote dissent without verbal dissent is rarely a plausible course of action for MPs, who almost always explain and defend their dissenting vote publicly as well.

13. All translations into German are our own.

14. The analyses for Austria and Britain also weight for the joint distribution of education and age. We do not apply education-based weights in Germany since our survey question does not exactly match census information; analyses that nevertheless include education weighting in Germany closely match the results presented below. Unweighted results are shown in Appendix A in the online supporting information.
15. We examine the effects of voter-MP congruence in Appendix B (Figures B5 to B8) in the online supporting information.

16. We include the radical-right FPÖ in Austria because it was leading in the polls at the time of the survey. Hence, we include parties at over 20% in the polls.

17. The politician either grew up in the same region as this respondent or moved to this region before the last election.

18. The occupations of the politician’s parents were factory worker, plumber, or bricklayer (working-class father) and shop assistant or hairdresser (working-class mother); insurance sales agent, small businessman, or policeman (middle-class father) and secretary or nurse (middle-class mother); and university professor, business owner, or politician (upper-middle-class father) and judge or general practitioner (upper-middle-class mother).

19. The politician previously worked as one of the following: teacher, hotel manager, local council employee, accountant, GP, senior manager, journalist, bank manager, or press secretary for the party. We also stated the sector of the job (public or private).

20. In a pretest, we also tried an additional question on the perceived competence of each MP. Several respondents indicated that separating these dimensions proved to be too difficult.

21. Unlike Hainmueller, Hangartner, and Yamamoto (2015), we use a paragraph instead of a table format. Our pretest in Britain and Germany revealed only small (and nonsignificant) differences in effect sizes across these two versions. Moreover, respondents on average needed as much time to perform the five choice tasks in both versions.

22. The questions were asked after the conjoint analysis experiment.

23. No “don’t know” option was provided.

24. No “don’t know” option was provided. Results using ordinal logistic regression are substantively identical to those presented in Figure 2.

25. We cannot exclude that some voters inferred from verbal but not vote dissent that MPs act somewhat hypocritically, putting party over country. Note, however, that if this was the dominant reaction of respondents to this treatment, we would observe negative average effects of verbal-only dissent.

26. In Appendix D in the online supporting information, we show indicative results that respondents who see dissent as more costly also reward dissent more, providing further evidence for our overall hypothesis.

REFERENCES


from Canada on Party Switching. *Parliamentary Affairs* https://doi.org/10.1093/pagst/ogy050


Costly signals


Supporting Information

Additional supporting information may be found in the online version of this article at the publisher’s web site:

Appendix A: Regression Results
Table A1: Full Regression Results
Figure A1: Unweighted Country-Level Differences in the Perceived Frequency and Costs of Dissent
Figure A2: Unweighted Country-Level Differences in Reactions to Dissent
Figure A3: Unweighted Reactions to Different Types of Dissent
Appendix B: Variation of MP Dissent Effects
Figure B1: Differences in Reactions to Dissent for Government and Opposition MPs
Figure B2: Differences in Reactions to Dissent for Partisans and Nonpartisans
Figure B3: Differences in Reactions to Dissent for Left-Right Voter Preferences
Figure B4: Differences in Reactions to Dissent for Extreme-Moderate MPs
Figure B5: Differences in Reactions to Dissent for Left-Right Voter Preferences and Center-Left MPs on the Left Wing
Figure B6: Differences in Reactions to Dissent for Left-Right Voter Preferences and Center-Left MPs on the Moderate Wing
Figure B7: Differences in Reactions to Dissent for Left-Right Voter Preferences and Center-Right MPs on the Moderate Wing
Figure B8: Differences in Reactions to Dissent for Left-Right Voter Preferences and Center-Right MPs on the Right Wing
Appendix C: Accounting for Other Country-Level Differences
Figure C1: Country-Level Differences for Individual-Level Characteristics
Figure C2: Country-Level Differences in Individual-Level Populism
Figure C3: Country-Level Differences in Reactions to Dissent with Added Controls
Appendix D: Individual-Level Variation in Reactions to Dissent Based on Perceived Costs of Dissent
Figure D1: MP Dissent Effects by Voter-Level Perceptions
Appendix E: Conjoint Analysis Diagnostics
Appendix F: Sample Diagnostics
Table F1: Sample Characteristics and Census Figures
Figure F1: Left-Right Placement in Each Country (Election Study and SSI Data)