Legislator dissent as a valence signal

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Abstract

Existing research suggests that voters tend to respond positively to legislator independence due to two types of mechanism. First, dissent has an indirect effect, increasing a legislator’s media coverage and personal recognition among constituents (*profile effects*). Second, constituents react positively to dissent when this signals that the legislator has matching political or representational preferences (*conditional evaluation*). We argue for a third effect: dissent acts as a *valence signal* of integrity and trustworthiness. Consistent with the valence signalling mechanism, we use new observational and experimental evidence to show that British voters have a strong and largely unconditional preference for legislators who dissent. Our findings pose a dilemma for political systems which rely on strong and cohesive parties.
The notion of responsible party government relies on the ability of disciplined parties to offer voters coherent policy packages which they can credibly commit to implement, if elected.\(^1\) Party disunity – when legislators dissent from their party line by voting against it in parliament or by speaking out against it in the media – can potentially undermine this collective accountability mechanism.\(^2\) The question of why intra-party dissent occurs has therefore received much scholarly attention.\(^3\) A common argument made in this literature is that legislators have an electoral incentive to demonstrate their freedom from the party line,\(^4\) and this has motivated scholars in a number of countries to test whether independent-minded legislators – often equated with legislative rebels – are more popular and more electorally successful than party loyalists.\(^5\)

An unresolved question in this literature is why constituents should prefer MPs who demonstrate their independence from the party over MPs who remain staunchly loyal. Existing research proposes two types of explanation. According to the first, dissent has no direct effect on voter evaluations of a legislator. Instead, any increase in voter support comes from a profile effect whereby independent-minded legislators benefit from enhanced media coverage and name recognition. The second type of explanation suggests that voters evaluate legislator dissent conditional on political context: for instance, voters may only react positively to dissent if the policy stance taken by the dissenting legislator is more aligned with their own views, or those of the legislator’s constituents; or voters’ reaction may depend on whether they identify with the legislator’s party and therefore internalise the costs of disunity in terms of damage to the party brand.

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\(^2\) Benedetto and Hix 2007; Carey 2009, 92-94.
\(^3\) Benedetto and Hix 2007; Collie 1988; Cowley 2002, 2005; Cox 1987; Kam 2009.
\(^4\) Cain, Ferejohn and Fiorina 1987; Carey and Shugart 1995; Carey 2009; Kam 2009.
\(^5\) These studies have examined the electoral effects of partisan loyalty in the United States (see Carson, Kober, Lebo and Young 2010), the United Kingdom (see Cowley 2005; Kam 2009; Pattie, Fieldhouse and Johnston 1994; Vivyan and Wagner 2012), New Zealand (see Kam 2009) and Slovakia (see Crisp, Olivella, Malecki and Sher 2013).
This article argues that to better understand voter responses to dissent we must supplement these two existing explanations with an additional one: *valence signalling*. This perspective emphasizes that dissent acts not just as a signal of legislator position or preferences, but also as a signal of legislator integrity and trustworthiness: constituents infer from dissent that a legislator is willing to risk punishment and personal standing within his or her party. Because integrity is a valence characteristic valued by all voters, voters see dissent *per se* as a positive signal about the character of the representative. Hence, dissent should have a generally positive impact on voter evaluations of a legislator.

By arguing that legislative dissent can serve as a valence signal for voters, this article helps to develop a new perspective on how voters respond to their representatives’ legislative activities. Traditionally, legislators’ votes, speeches and press releases have been analysed primarily as ‘position-taking’ activities which convey policy stances to constituents, with interest centring on whether constituents hold their representatives accountable for these policy stances. In contrast, we build on recent research by Carson et al. showing that voters in the US evaluate legislator behaviour less in terms of policy content and more in terms of how partisan this behaviour is, with party loyalists punished electorally. While Carson et al. focus more on the implications of this for legislative behaviour, our valence signalling mechanism provides a micro-level explanation for why voters may evaluate legislators who are highly loyal to their party less positively than those who dissent. Our findings also lend support to the formal model of legislative obstruction recently proposed by Patty, since voters’ treatment of legislative behaviour as a signal of legislator character

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6 Mondak 1995; Mondak and Huckfeldt 2006; Stone and Simas 2010.
7 Ansolabehere and Jones 2010; Carey 2009; Canes-Wrone, Brady and Cogan 2002; Mayhew 1974; Vivyan and Wagner 2012.
8 Carson et al. 2010.
is crucial in that model. More broadly, we demonstrate that the candidate valence literature provides useful theoretical tools for the study of how voters react to their representatives’ legislative behaviour.

We present empirical support for the valence signalling account based on observational and experimental survey data from Britain. Study 1 draws on new survey data measuring British voters’ views of their actual local MP. It establishes that there is a positive empirical association between perceived MP independence and MP approval. This association is observational and therefore only suggestive, but it is robust to controls for profile effects and does not appear to be strongly conditioned by partisan considerations. In Studies 2 and 3, we present evidence from conjoint analysis survey experiments in which we asked national samples of British voters to choose between pairs of hypothetical local MPs who varied randomly on several attributes, including their dissent behaviour. As explained in more detail below, an experimental approach allows us to better isolate the causal effects of MP dissent by dealing with important endogeneity and measurement issues present in any observational study of how voters react to MP dissent. The conjoint analysis design of the two experiments also enhances external validity and allows us to test whether the effects of MP dissent are conditional upon partisan considerations, implied policy proximity, or the motivation for dissent. In line with our valence signalling explanation, the results of both experiments suggest that dissent has a strong and largely unconditional positive effect on British voters’ evaluation of an MP.

Detailed experimental studies of voters’ reactions to legislator independence have so far been conducted only in the United States. Our study in the British context not only extends this

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9 Patty forthcoming.
research to a new country, but for several reasons should also be more informative regarding reactions to legislative independence in parliamentary systems more generally. For one, measured in terms of legislative voting cohesion, levels of party unity in Britain are broadly similar to those in many other parliamentary democracies, and much higher than in the United States.\textsuperscript{13} Second, the costs of dissenting from the party line are generally higher for legislators in parliamentary systems like the British one, because party leaders in these systems tend to have greater control over legislators’ career advancement and re-election prospects and therefore a greater ability to punish dissent.\textsuperscript{14} Third, while in the US partisan disloyalty tends to be more common among moderate legislators, dissent in the UK and in other parliamentary systems tends not to be synonymous with moderation, often occurring when MPs hold views that are more extreme than those of the party.\textsuperscript{15} We discuss how our findings apply to other contexts in more detail in the conclusion.\textsuperscript{16}

We begin the article by outlining the mechanisms through which dissent may affect voter evaluations of their representative. We then present the results from our three studies, beginning with the observational data before moving on to the experimental studies. We conclude by considering the broader implications of our findings.

**Theory and expectations**

Drawing on existing literature, we consider three mechanisms through which dissent may affect constituent evaluations of their legislative representative. Dissent could: (1) cause increased familiarity with the MP, creating a profile effect; (2) affect voter support conditionally based for instance on partisanship or policy preferences, creating varied effects among different sub-groups;\textsuperscript{13} Dalton, Farrell and McAllister 2011, 197.\textsuperscript{14} Kam 2009, 29-30.\textsuperscript{15} Benedetto and Hix 2007, 760; Cowley 2002, 105; Kam 2009, 80-87.\textsuperscript{16} Understanding voter attitudes toward dissent is also important for understanding contemporary British politics, since in recent decades dissent Members of Parliament (MPs) have become noticeably more willing to vote against the party line. For example see: Cowley 2002; Cowley 2005.
or (3) serve as a valence signal.

Profile effects

The profile effects hypothesis, suggested as one possible mechanism by Kam, contends that dissenting legislators receive electoral benefits due to their enhanced media profile. This increases their name recognition, which in turn leads to greater constituent approval and more support at the polls, for example via the recognition heuristic. If any increased electoral success of dissenting legislators is wholly the result of such effects, then constituents do not in fact react to independent-mindedness directly at all.

Conditional evaluations

In contrast, conditional evaluation accounts posit that dissent can have a direct impact on voter evaluations of a legislator, but that the nature of this effect depends on the nature and context of the dissent and on the particular preferences of the voter.

One type of conditionality relates to partisanship. Disunity can be damaging for the electoral fortunes of a party, and voters who have a strong affective tie to that party are arguably more likely to internalise these costs. If this is the case, then voters are likely to engage in partisan assessments of MP dissent. Specifically, ‘co-partisan’ voters who identify with the party of their MP – and particularly ‘strong co-partisans’ who strongly identify with that party – should

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17 Kam 2009, 113.
18 Goldstein and Gigerenzer 2002; Oeusoonthornwaattana and Shanks 2010; Kam and Zechmeister 2013.
19 The profile effects hypothesis can help explain why MPs may benefit electorally from dissent even if voters do not pay attention to their legislative behaviour. It is consistent with the ‘compartmentalisation thesis’ (Norton and Wood 1993) which states that voters pay little attention to the legislative behaviour of their MP, because they recognise the constraints of strong party discipline. Instead, they focus on party performance and perhaps constituency service.
negatively evaluate acts of dissent from that MP, because such actions damage the party brand.\footnote{Carman 2006; Harbridge and Malhotra 2011.} The predictions regarding voters who identify with a party other than that of their MP (‘opposing partisans’) are more ambiguous: these voters may be indifferent to dissent from their MP, or may even have particularly positive evaluations of dissent, inasmuch as it damages the brand of a party that competes with their own. Finally, non-partisans may also react particularly positively to dissent, if many such voters have a general dislike for partisan politics.\footnote{Webb 1996.}

Such partisan assessments of dissent need to be distinguished from a subtly different type of conditionality which also relates to voter partisanship, and which we label \textit{partisan crowding out}. This refers to Kam’s argument that when voters with strong partisan attachments come to evaluate an individual politician, party-related considerations (including the party affiliation of that politician) tend to dominate so that there is little or no room left for any other information about the politician – such as their dissent behaviour – to have any impact.\footnote{Kam 2009, 119.} In contrast, the individual attributes of a politician have the potential to play more of a role for voters with no partisan attachments. Notice that, unlike the \textit{partisan assessments} account, the \textit{partisan crowding out} account does not assume that co-partisans have qualitatively different reactions to MP dissent compared to other types of voter. Rather, it would predict that any impact of dissent on voter evaluations of an MP should be attenuated among both strong co-partisans and strong opposing partisans, and should be accentuated among non-attached voters.

Partisanship is of course also related to voters’ policy preferences, which may form a further basis for conditional reactions to legislator dissent. Specifically, voters’ reactions to dissent may be conditional on \textit{policy proximity}. From this perspective, dissent informs voters about the policy position of the legislator as distinct from the policy position of the party, and voters react positively

\begin{footnotesize}
\footnotetext{1}Carman 2006; Harbridge and Malhotra 2011.
\footnotetext{2}Webb 1996.
\footnotetext{3}Kam 2009, 119.
\end{footnotesize}
if the implied policy position of the legislator is closer to their own preferred policy than that of the party. There is evidence from the US that policy proximity matters for voter evaluations of a legislators’ voting behaviour and also more limited evidence of this in the UK. If this type of conditionality is at work, we would expect to find that reactions to dissent depend on the implied proximity of the dissenting legislator to the voter.

For reasons explained above, policy preferences and support for dissenting MPs are likely to be related in different ways in the US and the UK. In the US, legislators who disagree with their party tend to be those voting on cross party lines to work with the rival party; these legislators should receive more support from moderate voters than loyalist legislators. In contrast, rebellious legislators in Britain tend to be those who are more ideologically extreme, making them less attractive from a policy perspective to moderate voters.

Finally, a third type of conditionality relates to the perceived motivation for the dissent, based on whether disagreement arises because the legislator is a delegate or a trustee. Past research consistently finds that voters generally prefer constituency delegates to trustees, so we would expect voters to react more positively to legislator dissent if the underlying motivation is that of a delegate aiming to reflect the will of constituents. Dissent should be less popular if it arises due to the personal policy preferences of the legislator. Note that this type of conditionality may also be driven in part by policy proximity concerns: a voter may reasonably assume that if their local legislative representative is driven by the policy preferences of his or her constituents, then any dissent the legislator does engage in is more likely to reflect the voter’s own policy preferences as

24 Converse and Pierce 1986.
25 For the US, see for example: Ansolabehere and Jones 2010; Canes-Wrone, Brady and Cogan 2002; though see Carson et al. 2010. For the UK, see for example: Pattie, Fieldhouse and Johnston 1994; Vivyan and Wagner 2012.
26 Harbridge and Malhotra 2011.
29 For example: Carman 2006; Converse and Pierce 1986, 686; Mendez-Lago and Martinez 2002; Patterson, Hedlund and Boynton 1975.
one of those constituents.

**Dissent as a valence signal**

In addition to the profile and conditional support mechanisms laid out so far, we propose that legislator dissent also acts as a *valence signal* for voters. When deciding between candidates for office, voters do not just pay attention to candidate policy or ideology but also place considerable weight on the candidates’ valence attributes – that is, those attributes that all voters can agree are intrinsically positive.\(^{30}\) Such attributes include competence, charisma, devotion to public service and integrity.\(^{31}\) It is the last of these that we believe is especially relevant for discussions about legislator dissent.

Simply put, we contend that dissent acts as a signal to voters that the legislator has integrity. For one, dissent shows voters that a legislator reasons on his or her own rather than engaging in lock-step partisan behaviour.\(^{32}\) Moreover, especially in a parliamentary system, dissent is a *costly* act. These costs arise because party leaders generally control the allocation of frontbench or ministerial positions and have strong incentives to utilize this power to encourage party discipline by making advancement to these posts conditional on loyalty to the party line.\(^{33}\) Even for legislators who have previously served as ministers or who believe they have little chance of ever being promoted, there are social or psychological costs to dissenting from the party.\(^{34}\) From this perspective, voters observe MP dissent as a signal that the MP cares about more than just climbing the ministerial ladder or getting on with his or her Westminster colleagues. As a result, dissent should have a general positive impact on voter evaluations of an MP.

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\(^{30}\) McCurley and Mondak 1995; Mondak 1995; Mondak and Huckfeldt 2006; Stone and Simas 2010.

\(^{31}\) Adams and Merrill 2013.

\(^{32}\) Carson et al. 2010.

\(^{33}\) Benedetto and Hix 2007; Kam 2009.

\(^{34}\) Cowley 2002; Crowe 1986; Kam 2009.
There is some existing evidence that voters view legislative dissent as unconditionally positive. Carson et al. show that support for legislative dissent in the US is not based on the policy content of this dissent, although they do not directly test whether this support is conditional on co-partisanship or motivation for dissent, nor whether support varies for different types of dissent. In studies asking constituents about what should motivate representative behaviour, respondents also routinely place ‘the party’ lowest of all answers, below other influences such as constituency preferences or the representative’s own conscience. Evidence from the UK also shows an increase in the importance voters place on independence as opposed to loyalty.

If dissent acts as a valence signal, then this also has observable implications for how voters should respond to different types of legislator dissent. There are many ways that representatives can register their disagreement with the party line, and these ways of dissenting differ in the strength of the signal they send. We therefore attempt in this article to test for a broader concept of independence than just voting in parliament, which has been the focus of much of the literature thus far.

One simple way of categorizing the signalling power of dissent is by distinguishing between public and private disagreement. Legislative rebellion – voting against the party line – has generally been the primary way of measuring legislator independence. Representatives can dissent publically in other ways: some involve parliamentary procedures, such as signing critical motions or asking critical questions, while others involve speaking out, whether in parliament, in the media or

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35 Carson et al. 2010.
36 For example Bengtsson and Wass 2011; Carman 2006; Converse and Pierce 1986; Patterson, Hedlund and Boynton 1975.
38 Crowe 1983, 909; Kam 2009, 118.
39 For example: Carson et al. 2010; Pattie, Fieldhouse and Johnston 1994; Vivyan and Wagner 2012.
at public meetings.\textsuperscript{40} Private dissent, by contrast, is not visible, taking place in closed party
meetings or in one-to-one conversations between politicians. Many parties allow such private
dissent, and it is an important way in which legislators can try to influence the party line. British
MPs themselves often stress the importance of these private forms of voicing their opinion over
more public forms of dissent.\textsuperscript{41}

However, the valence signalling account would predict that public dissent has a greater
positive impact on voter evaluations of an MP than does private dissent. This is because public acts
of dissent are likely to be more costly for the MP, with party leaders being more understanding of
expressions of dissent made behind the scenes. If the valence signalling explanation is correct, then
the costlier signal should be seen by voters as a better indicator of the character of the
representative, and we would expect voters to prefer public over private dissent.\textsuperscript{42} Of course, voters
will generally not be able to observe private dissent, but this argument can be tested experimentally
by providing subjects with the necessary information.\textsuperscript{43}

\textbf{Study 1: Observational evidence}

As a first step in our analysis, we present observational evidence from new survey data measuring
British voters’ views concerning their local MP. We use this data to test whether there is a positive
association between voters’ perceptions of MP independence and their approval of their MP – as

\textsuperscript{40} Berrington 1973; Finer, Berrington and Bartholomew 1961; Franklin and Norton 1993; Kellerman 2012; Mayhew
1974.

\textsuperscript{41} As an example: in 2013, the website politics.co.uk listed the most independent British MPs using a panel of expert
commentators. Most of those shortlisted had voted against the party line at some point, but not all had done so, and
none of those identified as the most independent came from the ranks of the most rebellious MPs (Cowley 2013). More
generally, see Cowley 2002.

\textsuperscript{42} The costs of public acts of dissent may be contingent on the circumstances. Votes against the party line on close votes
on key pieces of legislation are particularly costly, while occasional off-message speeches or articles in the press may
be forgiven.

\textsuperscript{43} An alternative explanation for why voters may generally prefer dissent is that they believe frank debate is likely to
lead to better quality policies, rather than because dissent signals integrity on the part of the individual MP. If this were
the case, then we should expect that voters react equally positively to internal dissent and to public dissent because both
contribute to debate and thus to better policy. As we show later, our Study 3 results suggest that this is not the case.
predicted by the valence signalling explanation – and to check whether this association is driven by profile effects or is largely conditional on voter partisanship. While this observational analysis cannot definitively establish causal relationships, from the perspective of external validity it is nevertheless important to show that British voters’ evaluations of their actual MPs are consistent with our expectations.

Our data here comes from a survey of a representative sample of 1,758 British voters carried out by YouGov on 1-2 July 2013. In this survey we measured how independent respondents perceived their MP to be on a five-point scale. Our direct measurement of perceived MP independence contrasts with existing studies of British voters, which examine whether MP approval (or likelihood of voting for an MP) is associated with objective measures of MP independence, usually legislative rebellion. The latter approach leaves little scope to separate out voters’ preferences over MP behaviour and their information regarding that behaviour: for example, there may be a weak link between actual MP independence and MP approval because voters know about the behaviour of their MP but do not care, or because they do not know about the behaviour of the MP but would care if they did. Furthermore, MPs can signal independence to their constituents through behaviour that is difficult to measure systematically, such as media interviews, opinion pieces, or speeches in Parliament. By directly measuring respondent perceptions of their local MP’s independence, we can avoid these problems.

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44 Our sample is drawn from YouGov’s online panel of over 360,000 British adults, and is designed to be broadly representative of the national population in terms of age, gender, social grade and newspaper readership. For full details see https://yougov.co.uk/about/panel-methodology/. A recent comparison of YouGov data with a traditional face-to-face survey showed only small differences in the distribution of most key explanatory variables and in regression models for political choices. See Sanders et al. 2007 for further details.

45 The survey question was: ‘Some MPs are described as being independent-minded. Others are seen more as party loyalists. How would you describe your MP?’ The response options were ‘very party loyalist’, ‘fairly party loyalist’, ‘neither’, ‘fairly independent-minded’ and ‘very independent-minded’. In Appendix C, we show that responses to this question are statistically significantly, if substantively weakly, linked to actual MP rebelliousness as measured through parliamentary votes.

46 See, for example, Vivyan and Wagner 2012 and Kam 2009, although the latter does employ a measure of media dissent when looking at MPs in New Zealand.

47 Vivyan, Wagner and Tarlov 2012.
Valence. The valence explanation would predict that voters should be more satisfied with their MP when they perceive that MP to be more independent-minded. To test this, we estimate an ordinary least squares regression where the outcome variable is respondent satisfaction with their local MP measured on a five-point scale,\(^{48}\) and the predictor is perceived MP independence, included as a continuous predictor.\(^{49}\) Because both our outcome and predictor variables are likely to be influenced by factors that vary at the constituency-level, we cluster standard errors by constituency.

The resulting regression estimates are presented as Model 1 in Table 1 and suggest that voters’ perceptions of the independent-mindedness of their MP are indeed positively related to their overall evaluations of the MP. The perceived MP independence coefficient is positive and both statistically and substantively significant. A one-unit increase in a voters’ perceived independence of an MP is associated with a 0.4 unit increase in average satisfaction with the MP, as measured on a five-point scale. This is roughly equivalent to one third of the standard deviation of MP satisfaction in the sample.

[Table 1 about here]

Model 2 shows that the point estimate and standard error for the perceived MP independence coefficient remain virtually unchanged if we control for a number of variables which might plausibly influence both perceived independence and voter satisfaction. First, we control for

\(^{48}\) Specifically, we asked respondents ‘Are you satisfied or dissatisfied with the way your local MP is doing his/her job?’ Response options were 1 = ‘very dissatisfied’, 2 = ‘fairly dissatisfied’, 3 = ‘neither satisfied nor dissatisfied’, 4 = ‘fairly satisfied’, 5 = ‘very satisfied’. Although this measure is strictly ordinal, in this analysis we treat it as continuous and model it using OLS as this yields coefficients that are easily interpretable. In the supplementary materials (Appendix B), we show that our results are substantively unchanged when we re-estimate the regressions in Table 1 using ordered probit models.

\(^{49}\) Our measure of perceived MP independence is strictly ordinal. For parsimony, we treat it as a continuous predictor here as this entails interpretation of only a single coefficient. In the supplemental materials (Appendix B) we show that our substantive findings are virtually unchanged when we re-estimate the regressions in Table 1 including perceived MP independence as a categorical predictor. That approach also allows us to include an indicator for the 34% of respondents who answer ‘Don’t know’ to the question tapping perceived MP independence. It turns out that such respondents express moderate levels of MP satisfaction, similar to those who perceive their MP to be ‘fairly loyal’.
respondent-MP partisan congruence, where the respondent is a ‘co-partisan’ if he or she identifies with the party of the MP, an ‘opposing partisan’ (the baseline category) if he or she identifies with a party other than that of the MP, or ‘non-partisan’ if he or she does not identify with any party.\textsuperscript{50}

Second, we control for a number of MP characteristics: whether or not the MP held a government payroll post or a corresponding shadow post for the opposition during the 2010 Parliament and prior to the survey fieldwork dates; gender; education; age; tenure in the House of Commons; and, finally, majority size. Third, we control for basic respondent characteristics including age group, gender, social grade, interest in politics, and region.

Profile effects. If the profile effects hypothesis explains voter reactions to MP independence, the observed association between perceived MP independence and MP approval may be spurious. It may be that (1) voter familiarity with their MP actually drives satisfaction with MP, but (2) voters who are more familiar with their MP also tend to think their MP is independent as both are partly driven by the actual independence of the MP. If this were the case, we would expect the observed association between perceived MP independence and MP approval to be attenuated once we control for familiarity with MP. We test this in Model 3 of Table 1 by adding a measure of respondent knowledge about their local MP. This is calculated based on questions asking respondents about their MP’s sex, political party and name, and ranges from 0 (no questions answered correctly) to 3 (all questions answered correctly).\textsuperscript{51} Comparing Models 2 and 3, the coefficient on perceived MP independence remains virtually unchanged once we control for respondent knowledge of MP. In other words, consistent with the valence hypothesis, the positive relationship between voter

\textsuperscript{50} We do not have measures of the strength of party identification in this data.

\textsuperscript{51} We use an additive scale because we find respondents’ knowledge of MPs to be gradated. A minority of respondents (43\%) knew the name of their MP, but some of those who did not were nevertheless able to identify the MP’s party and/or sex. If we instead control for MP name recall alone, the estimated effects of perceived MP independence are virtually unchanged.
perceptions of MP independence and satisfaction with MP is not simply a proxy for MP profile effects.\textsuperscript{52}

This is not to say, however, that there is no evidence that profile effects are an additional mechanism through which MP independence affect constituent evaluations of an MP. After all, the estimated coefficient on MP knowledge in Model 3 is positive and significant, indicating that voters who know more about their MP also tend to be more satisfied with their MP. Moreover, in further analysis appended to this paper, we show that, consistent with the profile effects hypothesis, respondents tend to know more about their MP when he or she rebels more often.

\textit{Partisan conditionality}. Our survey data allows us to perform an initial test of the argument that the association between perceived MP independence and satisfaction with MP will depend on partisanship, whether due to \textit{partisan assessments} or \textit{partisan crowding out}.\textsuperscript{53} We do so in Model 4 of Table 1 by adding an interaction between perceived MP independence and the respondent-MP co-partisanship indicators. The significant and positive coefficient on the constituent term for perceived MP independence (0.49) indicates that perceived MP independence is positively associated with MP approval among ‘opposing partisans’ (the baseline voter-MP partisanship group who identify with a party other than that of their MP), while the non-significant coefficient on the first interaction term indicates that there is little evidence that the association differs different among ‘non-partisans’. The coefficient on the second interaction term is, in contrast, significant and negative, indicating that the association between perceived MP independence and MP approval is attenuated among ‘co-partisans’ who identify with the party of their MP.

The finding that co-partisans tend to be less favourably disposed toward MP independence

\textsuperscript{52} In Appendix D, we show that MP familiarity does not \textit{moderate} the impact of perceived MP independence, either.

\textsuperscript{53} We lack the measures in this survey data to test the other two types of conditional evaluations. However, we test these below in Studies 2 and 3.
than opposing partisans or non-partisans provides some evidence in favour of the partisan assessments hypothesis. Nevertheless, co-partisans do still appear to be very favourably disposed to MP independence: the coefficients on the constituent term and the relevant interaction term in Model 4 indicate that a one-unit increase in perceived MP independence is associated with a $0.50 - 0.16 \approx 0.34$ unit increase in average levels of satisfaction with MP. The fact that there is a positive and substantial association between perceived MP independence and MP satisfaction even among voters who identify with the party of their MP suggests that, consistent with the valence signalling hypothesis, voters in general view MP independence positively.

*Summary.* Together, these observational analyses suggest that there is a robust positive relationship between how independent-minded British voters perceive their MP to be and how satisfied they are with their MP. While in the UK legislator independence from party is often associated with more extreme policy positions, the results are nevertheless similar to those in the US context, where legislator independence tends to be associated with moderation. That voters appear to have a general preference for independent-minded legislative representatives in two contexts where the policy implications of independent-mindedness tend to be quite different provides support for the argument that legislator independence from party is viewed primarily as a valence signal, rather than judged primarily on policy grounds.

However, there are limitations to this observational evidence, which leaves open questions about the causal mechanisms driving the observed patterns of association. For example, there may be simultaneity, where respondents substitute their answers to questions about MP independence

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54 Carson et al. 2010.
with their overall evaluation of MP quality.\textsuperscript{55} In the next section, we employ an experimental approach to address these types of concerns.

**Study 2: Experimental evidence on preferences over the frequency of MP dissent**

To better examine the causal effects of MP independence on voter evaluations, we conducted two conjoint analysis survey experiments. In these experiments, we asked voters to choose between pairs of hypothetical MPs who varied randomly in terms of several attributes, including their level of independence from party. By comparing the rates at which MPs with differing characteristics win pairwise contests, we can estimate the effects of each attribute on voter preferences.

Our experimental approach has important advantages compared to an observational strategy: because MP dissent is randomly assigned, any effect on voter evaluations cannot be due to simultaneity or the strategic behaviour of MPs, either of which may cause identification problems in an observational analysis; and while an observational approach makes it difficult to accurately measure the information to which voters are exposed – and therefore to account for profile effects – a survey experiment affords us control over the information respondents receive about the MPs they evaluate. Furthermore, the conjoint analysis approach we use yields additional advantages compared to other types of survey experiment. Randomizing multiple MP attributes allows us to test whether voters view an MP’s dissent behaviour as a salient factor when asked to simultaneously consider other MP attributes, whether the effect of dissent is conditional on those other MP attributes, or whether voters simply view dissent as a proxy for these other attributes. Providing respondents with multidimensional choices and rounded MP profiles also increases the external

\textsuperscript{55} The concern about simultaneity is assuaged to some extent by regression analysis in the supplementary materials (Appendix C) showing a positive and significant association between actual MP dissent (as measured crudely by rates of rebellion in Commons divisions) and perceived MP independence. This suggests that perceptions of MP independence are at least in part driven by the actual behaviour of the MPs.
validity of inferences and, by creating multiple justifications for any given response, can also reduce social desirability bias.\textsuperscript{56}

Our first conjoint analysis experiment examines whether the frequency with which an MP dissents from the party effects voter evaluations of that MP, and whether this effect is conditional upon partisans or policy proximity considerations.

\textit{Experimental design.} The experiment was fielded on 5-6 December 2012 to a YouGov sample of 1,899 British voters. After a short introduction, respondents were presented with a series of choices (choice tasks) between pairs of hypothetical MPs, each characterised in terms of several attributes whose values varied randomly. The key attribute is the \textit{frequency} of dissent, defined as how often the MP ‘speaks out or votes against his/her party leadership’, with possible values ‘never’, ‘rarely’, ‘sometimes’, or ‘often’. Note that the phrasing of this attribute captures a broad notion of dissent, defined not just in terms of legislative voting records, but also in terms of an MP’s public statements.\textsuperscript{57}

In addition to frequency of dissent, MPs were characterised by a further four attributes:

- Party affiliation of the MP, varying between Labour and Conservative.\textsuperscript{58}
- Constituency effort allocation of the MP, measured as the number of days in a five-day week that the MP typically spends working on local constituency issues. Possible values varied between 1/2/3/4 days, with the remainder spent reviewing and working on national policies

\textsuperscript{56} Hainmueller, Hopkins and Yamamoto 2014, 27.
\textsuperscript{57} It is noteworthy that in the last 20 years no British MP has suffered the most severe sanction – of having the whip removed (i.e., being suspended from the party) – as a result of their voting in parliament, but several MPs have lost the whip because of things they have \textit{said}. In practice, dissent by voice and vote are even more intertwined than this, for example when a public statement on an issue can lock the representative into a position. As one Labour whip put it, part of party management is finding ‘opportunities for them to get off whatever hook they’d impaled themselves on’ (Cowley 2005, 163). In the supplementary materials (Appendix A) we present evidence from a further split-sample survey experiment which suggests that dissent in the form of speaking out is valued at least as much by voters as dissent in the form of legislative voting.
\textsuperscript{58} We did not include MPs from other political parties for reasons of simplicity.
in Parliament.\textsuperscript{59}

- Tenure in parliament, varying between 3, 10 and 21 years.
- Sex of the MP (male or female).

Several considerations went into selecting these additional attributes. First, based on past research, all MP characteristics (and particularly party affiliation) are potentially salient for voters, allowing respondents to ignore MP dissent when making their decisions.\textsuperscript{60} Second, the inclusion of MP party affiliation, combined with separate measurements of respondents’ party identification and their perceived position relative to parties on a left-right scale, allows us to test whether the effects of MP dissent are conditional on partisan or policy proximity considerations. Third, the inclusion of constituency effort allocation allows us account for the possibility that – in the absence of information about this attribute – respondents might prefer MPs who dissent simply because they assume that MPs who are more willing to forgo career advancement at Westminster are more likely to be assiduous constituency servants.

MP attribute values were assigned via completely independent randomization, such that all possible combinations of attribute values were equally likely in expectation.\textsuperscript{61} As illustrated in the example screenshot from the experiment (Figure 1), MP descriptions were presented in the form of bulleted paragraphs, with levels of attributes highlighted in bold.

[Figure 1 about here]

Our outcome variable is measured based on the following question, asked after the descriptions of the two MPs: \textit{Based on this information, which ONE of these two MPs would you...
prefer to have as your MP in the House of Commons?\(^{62}\) In each study, respondents completed a total of five choice tasks.

Analysis. We stack the resulting experimental data so that for each respondent we have ten observations, one for each of the two hypothetical MPs in each of the five choice tasks. Thus, we have 1,899 x 2 x 5 = 18,990 observations. Our outcome variable is a binary indicator of whether or not the hypothetical MP in question was chosen by the respondent.

Our quantity of interest is the average marginal component effect (AMCE) of each level of each attribute.\(^{63}\) In this particular context, the AMCE is the change in the probability that an MP is preferred when the value of an attribute (i.e., component) is changed from one level to another, averaging over all possible values of the MP’s remaining attributes and all possible values of the attributes of the other MP in the choice task. Completely independent randomization of attribute levels means that unbiased AMCE estimates can be obtained using simple difference-in-means analysis. As recommended by Hainmueller et al., we estimate these differences in means using OLS regression with dummy variables for each attribute level except the baseline and clustering standard errors by respondent.\(^{64}\)

Main results. Figure 2 shows the effect of frequency of dissent on the probability that an MP is preferred. If voters perceive legislator independence as a valence signal we would expect them to react positively to an MP who dissents from their party. Figure 2 suggests that this is indeed the

\(^{62}\) A response was required; there was no ‘don’t know’ option.

\(^{63}\) Hainmueller, Hopkins and Yamamoto 2014.

\(^{64}\) Hainmueller, Hopkins and Yamamoto 2014. More formally, let \(Y_{ijk}\) equal one if respondent \(i = 1, \ldots, 1899\) chooses MP \(j = 1, 2\) in choice task \(k = 1, \ldots, 5\), and zero otherwise. Furthermore, let \(D_{ijk}^l\) be a binary indicator that equals one if attribute \(D\) takes on level \(l = 1, \ldots, L\) for this observation. We estimate the following regression equation:

\[
Y_{ijk} = \alpha + \beta_1 D_{ijk}^1 + \beta_2 D_{ijk}^2 + \ldots + \beta_{L-1} D_{ijk}^{L-1} + \varepsilon_{ijk},
\]

where \(\varepsilon\) is an error term, and \(\beta_l\) is the AMCE estimate for level \(l\) of attribute \(D\) relative to the baseline level, \(L\).
case. Voters are on average 13 [11, 15] percentage points more likely to prefer an MP who rarely speaks out or vote against the party to one who never does so (the baseline). Moreover, again compared to an MP who never dissents, voters are 30 [28, 32] and 32 [30, 34] percentage points more likely to prefer MPs who dissent sometimes and often, respectively. To put the magnitude of these effects into perspective, the largest estimated AMCE of any of the other MP attributes included in Study 2 is below 15 points. Thus, there is strong experimental evidence that, consistent with the hypothesis that voters evaluate MP dissent as a valence signal, British voters strongly prefer to have an MP who frequently dissents against his or her party leadership.

[Figure 2 about here]

Partisan conditionality. Both the partisan assessment and partisan crowding out accounts predict that voter responses to MP dissent will depend on their identification with the party of the MP. To test this we coded a measure of the respondent-MP co-partisanship based on the party affiliation of the hypothetical MP and the strength of party identification of the respondent, giving us five categories: ‘strong co-partisan’, ‘weak co-partisan’, ‘non-attached’, ‘weak opposing partisan’ and ‘strong opposing partisan’. Thus, for example, where a respondent strongly identifies with the Labour Party and is presented with a Labour MP, this is coded ‘strong co-partisan’; where the same respondent is presented with a Conservative MP, this is coded ‘strong opposing partisan’.

Figure 3 plots the effects of MP frequency of dissent for sub-samples according to levels of

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65 We discuss the results for the other attributes briefly in Appendix E. Appendix F also shows that preferences for MP independence are still substantively important and statistically significant when respondents were asked to choose between MPs from different parties.

66 Coding co-partisanship in this way offers a relatively manageable schema, but does so at the cost of obscuring the difference between respondents who identify with Labour or the Conservatives and those who identify with some other party. While the former can potentially be both co-partisans in our experiment, the latter can only ever be opposing partisans. In Appendix E we conduct a more fine-grained analysis separating out these groups and show that the effects of MP dissent remain relatively stable across subgroups.
respondent-MP co-partisanship. Looking first at the effect of an MP rarely dissenting (as opposed to never dissenting), the point estimates for this effect are positive and similar in magnitude across all partisanship subsamples, and the corresponding confidence intervals all overlap. Turning to the effect of an MP who sometimes dissent, the point estimates for this effect are slightly smaller for strong co-partisans and opposing partisans, but even among these groups the estimated effect is positive and large in absolute terms (increasing the probability that an MP is preferred by more than 25 per cent). Finally, looking at the effect of an MP who often dissent, the point estimates for this effect are clearly smaller in magnitude when the respondent is a strong co-partisan of the MP, but nevertheless still positive and large in magnitude (at around 20 per cent).

[Figure 3 about here]

Thus, Figure 3 suggests that voters react positively to MP dissent regardless of co-partisanship. To be clear, this is not to say that reactions to MP dissent are in no way conditional on respondent-MP co-partisanship: in fact, according to an F-test there are some statistically significant differences in the effect of MP frequency of dissent across different levels of respondent-MP co-partisanship ($F = 3.27, p < 0.01$). Rather, what Figure 3 illustrates is that any differences by partisanship – whether due to partisan assessments of dissent or a partisan crowding out effect – are small compared to the overall positive effects of MP dissent. This is again consistent with the argument that MP dissent acts as a signal of valence qualities valued by all voters.

Policy proximity. The policy proximity hypothesis predicts that voters react more positively to MP dissent that is in support of a policy position closer to their own views. Although in our experiment we do not give explicit information about the policy position adopted by MPs when they dissent from the party, we can indirectly examine the explanatory power of the proximity hypothesis if we assume that respondents implicitly believe that dissenting Conservative MPs are on the right of the
Conservative party and dissenting Labour MPs on the left of the Labour party. This assumption is not unreasonable given that, in recent history, rebel Conservative MPs have mostly been located toward the right and rebel Labour MPs toward the left of their respective parties.\textsuperscript{67} The policy proximity hypothesis would therefore predict that, compared to other respondents, those positioned to the left of the Labour should react more positively to dissent from a Labour MP; likewise, those positioned to the right of the Conservatives should react more positively to dissent from a Conservative MP.

To test whether this is the case, we first divided our observations into two groups according to the party affiliation of the hypothetical MP. For observations where the MP was Conservative, we then further subdivided the sample according to whether or not the respondent placed themselves to the right of the Conservatives on a left-right scale (measured based on questions asked later in the survey) and estimated the effects of dissent separately for each subgroup. The top panel of Figure 4 plots the results. Whether looking at the effect of a Conservative MP dissenting rarely, sometimes or often, the estimates for respondents to the right of the Conservatives are similar in magnitude and statistically indistinguishable from those for respondents who are not.\textsuperscript{68}

[Figure 4 about here]

The bottom panel of Figure 4 plots the results of a similar exercise for Labour MPs. These observations are subdivided according to whether or not the respondent placed themselves to the left of Labour on a left-right scale. Again, the estimated effects of each level of MP dissent for respondents to the left of Labour are very similar to those for respondents who are not.\textsuperscript{69}

Of course, this is only an indirect test of the proximity argument, and it may be that voters’

\textsuperscript{67} Benedetto and Hix 2007; Cowley 2002; Cowley 2005; Kam 2009.
\textsuperscript{68} An F-test also fails to reject the joint null hypothesis that the effects of Conservative MP frequency of dissent are identical for respondents who are to the right of the Conservatives and those who are not (F = 0.77, p = 0.51).
\textsuperscript{69} An F-test also fails to reject the joint null hypothesis that the effects of Labour MP frequency of dissent are identical for respondents who are to the left of Labour and those who are not (F = 0.62, p = 0.60).
reaction to dissent is more noticeably conditional on policy proximity when the policy stance adopted by a dissenting MP is more explicit. Yet the striking stability of the effects of dissent across subgroups in Figure 4 makes us sceptical that policy proximity considerations dominate voter evaluations of displays of MP independence.\textsuperscript{70}

Summary. Consistent with valence signalling, the results of this conjoint analysis experiment suggest that there is a strong and general preference among British voters for a local MP who dissents from the party. This preference was not conditioned strongly by voter-MP co-partisanship or policy proximity.\textsuperscript{71}

Study 3: Type of dissent and motivation for dissent

Our second conjoint analysis experiment examines whether voters react more positively to MP dissent when this is likely to entail higher costs, and whether the effects of dissent are conditional upon the motivation for dissent.

Experimental design and analysis. This experiment had a similar format to that used in Study 2, with respondents choosing between pairs of MPs characterised by randomly varying attributes. However, the nature of these attributes differed in some respects from Study 2. Most importantly, rather than characterising MPs in terms of their frequency of dissent from the party, we varied both the motivation for dissent and the type of dissent. The motivation for dissent attribute had two possible levels: respondents were told that ‘when considering policy matters’ an MP mainly thought

\textsuperscript{70} As an alternative test for conditionality on policy proximity, in Appendix E we compare the effects of MP dissent for different combinations of MP party affiliation and respondent left-right position. Again, the effects of MP dissent are remarkably stable across subgroups.

\textsuperscript{71} In further analysis of the experimental results, we have also found that preferences for MP dissent frequency vary little by respondent sex, age group, education level, income group, social grade, regional location, political attention, or perceived external efficacy.
about their own personal views (a trustee MP) or their constituents’ views (a delegate MP). The type of dissent attribute captured how publicly an MP dissents when these ‘views on policy differ from those of the party leadership’, with three possible levels: ‘nevertheless tends not to speak out’; ‘tends to speak out at internal party meetings, but not publicly’; or ‘tends to speak out at internal party meetings and also publicly’. The three remaining attributes included in the experiment all also appeared in Study 2: MP party affiliation, constituency effort allocation, and sex.72

This experiment was fielded on 24-25 September 2013 to a YouGov sample of 1,919 British voters. Because each respondent again completed five choice tasks, we have 19,190 observations. As in Study 2, our outcome variable a binary indicator of whether or not the hypothetical MP in question was chosen by the respondent.73 Once more, we model this outcome variable using OLS. 

Effects of type of dissent. If voters perceive dissent as a valence signal, then public dissent by MPs should be preferred to private dissent, as the former is a more costly signal than the latter. Figure 5 shows AMCE estimates for these different types of dissent. As expected, while voters do clearly prefer an MP who speaks out internally to one who tends not to express dissent at all, there is a much stronger preference for an MP who speaks out both internally and externally. Comparing an MP who tends not to speak out to one who speaks out only internally, voters are on average 14 [12, 15] percentage points more likely to prefer the latter as their local representative. However, an MP who speaks out both internally and externally is 23 [22, 25] per cent more likely to be preferred by voters than one who tends not to speak out. 

[Figure 5 about here]

72 The placement of legislator independence varied across the two experiments: in Study 2 this was the last bullet point, and in Study 3 it was the second bullet point (with motivation for MP dissent the first bullet point).

73 In Study 3, we left out the phrase ‘in the House of Commons’ in the follow-up question.
Motivation for dissent. Because we varied not just the dissent behaviour of each MP, but also whether this dissent was motivated by trustee or delegate concerns, the design of Study 3 allows us to test whether voter reactions to dissent are conditional on the trustee-delegate motivation for that dissent. Figure 6 plots the estimated effects of MP dissent according to whether the MP was motivated by trustee concerns (black dots) and delegate concerns (white dots). While the point estimates of the effects of private and public dissent are slightly higher for delegate MPs than for trustee MPs, these differences are small in magnitude. In line with this, an F-test fails to reject the null hypothesis that the effects of MP dissent behaviour are not conditional on trustee/delegate motivation (F = 1.58, p = 0.21).74 There is little evidence that voter preferences for MP dissent are conditional on the trustee-delegate motivation for that dissent, even when voters are given explicit information about this motivation.

[Figure 6 about here]

Discussion and conclusion

This article has considered how voters react when a legislator speaks out or votes against his or her party. We have argued that one important way in which voters consider such dissent is as a signal of legislator integrity and trustworthiness. In line with this argument, our experimental and observational studies provide clear evidence that British voters have a strong preference for MPs who are willing to act independently from their party by speaking out or voting against the party frequently. Furthermore, we find that voters react more positively to public acts of dissent, which are more costly for an MP and therefore send a stronger valence signal. Crucially, our studies also

74 We also conducted more general tests for interactions between MP dissent and other MP attributes in both Study 2 and 3. F-tests indicate no significant two-way interactions between MP frequency of dissent and other MP attributes in Study 2. In Study 3, F-tests indicate that the only MP attribute which interacts significantly with MP type of dissent is MP gender (F = 3.7, p = 0.02). Further analysis suggests that the effect of speaking out privately or both privately and publicly is slightly (3-4 percentage points) more positive for male MPs than female MPs.
show that reactions to dissent are not strongly conditional on factors emphasised in some previous literature: the overall positive effect of dissent on MP evaluations persists regardless of voter-MP co-partisanship, policy proximity concerns or the trustee-delegate motivation for the dissent.

Our results also provide strong evidence that the effects of an MP’s dissent behaviour are unlikely to be solely attributable to that MP’s greater public profile. In the observational data, controlling for profile effects did not reduce the effects of perceived MP independence on MP approval. In the experimental data, we could rule out profile effects as all our experimental subjects were equally well informed about the behaviour of the hypothetical MPs.75

How similar should voter responses be in other countries? On the one hand, the costs of dissent for individual legislators are similarly high in other parliamentary systems, and parliamentary parties are as a result generally highly cohesive. Hence, disagreeing with the party will be a similarly strong signal in other parliamentary systems. However, the valence signal generated by dissent may be particularly strong when political parties are perceived to have low levels of integrity and trustworthiness, such as in the US and the UK today; voters in other contexts may react differently.76 Voter responses to dissent may also depend on how candidate-centred an electoral system is. British voters may be more likely to pay attention to dissent than voters in even more party-centred contexts, for instance with closed-list proportional representation. At the same time, responses to dissent may be stronger and more nuanced in more candidate-centred systems such as the US or countries with open-list proportional representation. Moreover, the British political system has historically had a strong, single-party executive with a relatively weak parliament. Even though this is less and less the case, British voters may still not be used to taking

75 This does not, of course, mean that valence signalling is the only mechanism at work. Under certain conditions, specific sub-groups of voters may react differently to dissent: for example, if considering legislator dissent on a single highly salient topic voters may start to place more weight on how well that legislator’s dissenting position accords with their own views on that issue.
76 Dalton 2004; Whiteley 2011.
individual candidate characteristics into account, which may lead such factors to become more important over time. Future research can therefore usefully both examine cross-national and temporal variation in voter reactions to MP dissent.

Overall, we have strong evidence that valence signalling is a key mechanism at work, suggesting that support for legislator independent-mindedness is therefore more general than previously thought. These findings have implications for research on the personal vote. Previous attempts to identify a relationship between MPs’ behaviour in the British Parliament and their subsequent success at the ballot box have based their analysis on rebellion as a source of positional information, and the results of these studies have been decidedly mixed.⁷⁷ An understanding of dissent as a valence signal may be a promising future approach to studying constituent reactions to legislator behaviour. Our findings also imply that legislators may benefit from communicating their general independence as well as – or indeed instead of – the reasons for their dissent.⁷⁸

This finding also has implications for parliamentary politics, highlighting a popular ambivalence toward party discipline even in a traditionally party-centric political system such as the UK. Cohesive political parties are a vital component of democratic representation in parliamentary systems, but this would be at risk if legislators frequently dissent from the party line. Importantly, our findings show that there is general support for such dissent across British voters, so that all legislators have electoral incentives to avoid lock-step obedience to their leadership: if support for dissent were strongly conditional on policy preferences or partisanship, then incentives to engage in such behaviour would be weaker as it would only improve an MP’s standing among a subset of constituents. From the stand point of democratic theory, our findings appear somewhat troubling, in that they highlight a challenge for the responsible party government model of democracy.

⁷⁷ e.g. Pattie et al. 1994; Vivyan and Wagner 2012.
⁷⁸ See also Grose et al. forthcoming.
If voters in general support independent-mindedness, this also presents a challenge to party leaders and party whips.\textsuperscript{79} If individual legislators have an incentive to demonstrate their independence, then this of course makes party management a more challenging task. Weaker party unity can also have electoral costs if the party as a whole appears divided as a result.\textsuperscript{80} However, we also show that voters care about voicing dissent rather than solely about rebelling in parliament. This suggests that party leaders may have some incentive to tolerate public statements of disagreement from their MPs – thus allowing individual MPs to increase their local personal support – while also enforcing tighter discipline on parliamentary votes. This in turn may act as a ‘safety valve’ for the political system more broadly, offering voters some sense that there representatives are not solely beholden to the party line while also maintaining reasonable levels of party cohesion in legislative votes. Future research could further investigate this possibility, along with other mechanisms for how parties can resolve the tension between voter demands for an independent local representative and the broader need for responsible party government.

\textsuperscript{79} Crisp et al. 2013.
\textsuperscript{80} Greene and Haber 2015.
Acknowledgements

Replication data are available from the journal's page
https://dataverse.harvard.edu/dataverse/BJPoiS. We provide supplementary material in the online appendix, covering additional statistical tests. Part of this research was funded by a British Academy Small Research Grant awarded to Nick Vivyan (grant number SG112504). We would like to thank the University of Nottingham for their generous support.

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Table 1: Regression models of satisfaction with local MP (Study 1)

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Note: Coefficient estimates from linear regression models with respondent satisfaction with MP as the dependent variable. Survey data described in main text. Standard errors clustered by respondent constituency. *** p < 0.01, **p < 0.05, *p < 0.1.
Figure 1: Example screen shots from conjoint analysis experiment (Study 2)

Note: The upper panel shows the introductory screen that respondents saw before beginning the experiment. The lower panel shows an example of a randomly generated comparison as a respondent would have seen it.
Figure 2: Popular preferences over MP frequency of dissent (Study 2a)

Note: Based on results from Study 2a. Each dot indicates the point estimate of the population AMCE relative to the baseline level of never dissenting. The bars represent the corresponding 95% confidence intervals.
Figure 3: Responses to frequency of MP dissent do not strongly depend on strength of co-partisanship (Study 2)

Note: Based on results from Study 2. Observations are grouped according to the strength of respondent-MP co-partisanship. For each subgroup, we estimate the effects of MP frequency of dissent relative to the baseline level of never dissenting. Each dot indicates the point estimate of the effect of a particular level of dissent for a particular level of co-partisanship (identified by dot shadings). The bars represent the corresponding 95% confidence intervals.
Figure 4: Preferences over frequency of MP dissent do not strongly depend on implied policy proximity (Study 2)

Note: Based on results from Study 2. For the top panel, we take all observations where an MP was Conservative and compare the effects of dissent for respondents who place themselves to the right of the Conservatives and those who do not. For the bottom panel, we take all observations with a Labour MP and compare the effects of dissent for respondents who place themselves to the left of Labour and those who do not. Each dot indicates the point estimate of dissent effects, relative to the baseline level of not speaking out. The bars represent the corresponding 95% confidence intervals.
Note: Based on results from Study 3. Each dot indicates the point estimate of the population AMCE relative to the baseline level, ‘tends not to speak out’. The bars represent the corresponding 95% confidence intervals.
Figure 6: Preferences over type of MP dissent do not depend strongly on whether the MP is a trustee or delegate (Study 3)

Note: Based on results from Study 3. The top panel presents estimates for hypothetical MPs who, ‘when considering policy matters’, mainly thought about their ‘constituents’ views’. The bottom panel presents estimates for MPs who mainly thought about their ‘own personal views’. Each dot indicates the point estimate of effects, relative to the baseline level of not speaking out. The bars represent the corresponding 95% confidence interval.
**Appendix. MP rebellion and MP profile**

As a further test of the profile effects explanation, we examine whether levels of knowledge about a local MP are positively associated with levels of actual MP rebelliousness. To measure respondent knowledge about their MP, we asked them for their MP’s sex, political party and name. On the basis of their responses to these, respondents were given an MP-knowledge score with a range from 0 (no questions answered correctly) to 3 (all questions answered correctly). As in the previous section, to measure MP rebelliousness we take the percentage of times an MP voted against the majority of their party and again transform this by adding one and taking the natural logarithm of the resulting sum. We again exclude respondents whose MPs were in Government payroll positions or in corresponding shadow positions for the Opposition, as these MPs are highly unlikely to have rebelled against their party.

Table A1 reports the results of two OLS regressions (with standard errors clustered by constituency). In line with the profile effects argument, there is a significant and positive association between actual MP rebelliousness and respondent knowledge regarding their MP. This association is robust to the inclusion of our set of controls for MP and respondent characteristics. However, the substantive magnitude of this association is not particularly strong. For example, in Column 2, the estimated coefficient on actual MP rebellion indicates that moving from being one of the least rebellious MPs (never voting against the party) to being a moderately rebellious MP (voting against the party 5% of the time) is associated with a 0.25 increase on the MP knowledge score. To place this in context, the latter scale has a standard deviation of 1.2 in our survey sample.
### Table A1: Regression models for voter knowledge of local MP

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</tr>
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<td><strong>Observations</strong></td>
<td>1,034</td>
<td>946</td>
</tr>
<tr>
<td><strong>R^2</strong></td>
<td>0.012</td>
<td>0.290</td>
</tr>
</tbody>
</table>

**Note:** Coefficient estimates from linear regression models with respondent knowledge of local MP as the dependent variable. Survey data described in main text. Standard errors clustered by respondent constituency. *** p < 0.01, ** p < 0.05, * p < 0.1.
On-line Appendix

Appendix A. Independence and rebellion

In the conjoint analysis design for Study 2 we characterize the dissent behavior of each hypothetical MP not just in terms of how often they vote against their party leadership in Commons divisions, but also in terms of how much they speak out against their leadership. Here we present evidence from an additional split-sample survey experiment which shows that dissent in the form of speaking out is valued at least as much by voters as dissent in the form of legislative voting. This split-sample experiment is much simpler in terms of its design than the conjoint analysis experiments, as just one attribute varies randomly for just one of the two MPs; in the conjoint analysis, all attributes vary randomly across both MPs.

The split-sample survey experiment was fielded to a sample of British voters via YouGov on 3 June 2013 (N=1,387). We asked respondents to compare two politicians and choose which one they would prefer to be their representative. More specifically, respondents were asked to read a vignette about a pair of hypothetical MPs:

Politician A is 48 years old. After university, where he studied physics, he trained as an accountant, and set up a successful company. He is married with three children. He is an avid cricket fan, and a keen player in his youth; he is now a passionate advocate for sporting facilities for young people. He also has interests in the health service and pensions. He became an MP in 2010 and is a member of the Heath Select Committee and is known to be a hard-working constituency MP and a party loyalist.

Politician B is 45 years old and studied business at University. Before entering politics, he was
a solicitor who ran a busy local practice. He is passionate about the environment and education. His wife is a primary school teacher and they have two children and he is a trustee of an educational charity that supports apprenticeships. He has been an MP since 2005 and he is known for his focus on education policy, and he never votes against his party line in the House of Commons.

Both A and B are plausible British MPs; they are both middle-aged men, in professional occupations. Moreover, this sort of information is the sort that candidates themselves present about themselves in their literature.

The respondents all saw these two vignettes as shown above, with only one attribute varying randomly: the frequency and type of rebellion conducted by MP B to include both dissent via vote and rebellion by voice. The possible levels of this attribute were: *he never votes against his party line in the House of Commons* (as above); *he never votes against his party line in the House of Commons but is known for being outspoken on issues where he disagrees with his party; he rarely votes against his party line in the House of Commons; he rarely votes against his party line in the House of Commons but is known for being outspoken on issues where he disagrees with his party; and he regularly votes against his party line in the House of Commons.*

Each screen concluded with the following question: *Without knowing which party they stand for, which politician would you prefer as your MP?* The response options were: A, Neither or B.

We code a dummy variable equal to one if a respondent chooses MP B and zero if a respondent chooses A.\(^81\) We then regress this dummy variable on indicators measuring each level of MP B dissent, with *‘he never votes against his party line in the House of Commons’* as the baseline. For each level of the dissent attribute, the estimated coefficient for the corresponding

---

\(^{81}\) We drop the 273 ‘Neither’ responses.
indicator represents the estimated average treatment effect of that level of dissent on support for MP B, relative to the baseline level of dissent. Figure S.1 plots these estimated coefficients and their 95 per cent confidence intervals.

Figure S.1 shows that support for MP B is little different when he ‘rarely’ votes against his party (row 3 in Figure S.1) compared to when he ‘never’ does so (row 1). However, when MP B votes against his or party ‘regularly’ (row 5), his support increases by 19 points compared to the baseline and the 95% confidence interval indicates that this effect is clearly distinguishable from zero.

As Figure S.1 also shows, including the phrases about the MP being willing to speak out against their party puts the effect of dissent via legislative voting into context. If MP B never votes against his party line but is willing to speak out on issues where he disagrees with his party (row 2), support for him increases by 24 points compared to the baseline case (row 1). Similarly, there is a big difference between the effects of MP B voting against his party line only ‘rarely’ (row 3) and MP B voting against the party rarely while also being outspoken (row 4): the latter clearly has a larger effect on support for MP B than the former. Indeed, whether MP B ‘never’ or ‘rarely’ votes against his party, his support is higher when he is outspoken (row 2 vs row 1, or row 4 vs row 3). In fact, support for MP B whenever he is described as outspoken is indistinguishable from support for MP B when he is described as voting against the party regularly (row 5). These results suggest that British voters value dissent expressed via speaking out against the party at least as much – and possibly more than – dissent expressed via legislative votes against the party.
Figure S.1: Preferences for rebellion by voice and vote

Note: The dots represent point estimates of the effect of each dissent attribute level on support for MP B over MP A. The bars show corresponding 95% confidence intervals. N per row: 254 (row 1), 300 (2), 297 (3), 258 (4), 277 (5).
Appendix B. Alternative model specifications for Study One

In the main text, we present the regression results when treating as continuous both the outcome variable (MP approval) and the key predictor (perceptions of MP independence). Here, we show results (1) when treating the dependent as ordinal and running an ordered probit model and (2) when treating the main predictor as categorical.

The results of the ordered probit model are presented in Table S.1. We can see that the main results still hold: perceived MP independence has a clear positive association with voter approval (Model 1), even when including key controls (Models 2 and 3); among co-partisans, this association is also positive and statistically significant, even if somewhat smaller than among other voters (Model 4); and finally, there may well be profile effects of MP independence, as indicated by the positive effect of MP knowledge (Model 3). Note that the standard errors are not clustered by constituency in this regression model.
Table S.1: Ordered probit regression models of satisfaction with local MP

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perceived MP independence</strong></td>
<td>0.405***</td>
<td>0.433***</td>
<td>0.453***</td>
<td>0.535***</td>
</tr>
<tr>
<td></td>
<td>(0.028)</td>
<td>(0.030)</td>
<td>(0.031)</td>
<td>(0.043)</td>
</tr>
<tr>
<td><strong>Voter-MP partisanship: Non-partisans</strong></td>
<td>-0.112</td>
<td>-0.090</td>
<td>0.218</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.095)</td>
<td>(0.095)</td>
<td>(0.228)</td>
<td></td>
</tr>
<tr>
<td><strong>Voter-MP partisanship: Co-partisans</strong></td>
<td>0.448***</td>
<td>0.443***</td>
<td>0.855***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.075)</td>
<td>(0.075)</td>
<td>(0.174)</td>
<td></td>
</tr>
<tr>
<td><strong>Perceived MP independence X Non-partisans</strong></td>
<td></td>
<td>-0.128</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.085)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Perceived MP independence X Co-partisans</strong></td>
<td>-0.166***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.063)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Knowledge about MP</strong></td>
<td></td>
<td>0.166***</td>
<td>0.169***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.039)</td>
<td>(0.039)</td>
<td></td>
</tr>
<tr>
<td><strong>Threshold 1:2</strong></td>
<td>-0.173**</td>
<td>0.408</td>
<td>0.768***</td>
<td>0.964***</td>
</tr>
<tr>
<td></td>
<td>(0.076)</td>
<td>(0.263)</td>
<td>(0.277)</td>
<td>(0.286)</td>
</tr>
<tr>
<td><strong>Threshold 2:3</strong></td>
<td>0.630***</td>
<td>1.266***</td>
<td>1.629***</td>
<td>1.828***</td>
</tr>
<tr>
<td></td>
<td>(0.076)</td>
<td>(0.264)</td>
<td>(0.278)</td>
<td>(0.288)</td>
</tr>
<tr>
<td><strong>Threshold 3:4</strong></td>
<td>1.425***</td>
<td>2.111***</td>
<td>2.483***</td>
<td>2.686***</td>
</tr>
<tr>
<td></td>
<td>(0.082)</td>
<td>(0.268)</td>
<td>(0.282)</td>
<td>(0.292)</td>
</tr>
<tr>
<td><strong>Threshold 4:5</strong></td>
<td>2.628***</td>
<td>3.416***</td>
<td>3.807***</td>
<td>4.015***</td>
</tr>
<tr>
<td></td>
<td>(0.101)</td>
<td>(0.277)</td>
<td>(0.293)</td>
<td>(0.303)</td>
</tr>
<tr>
<td><strong>Respondent controls</strong></td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>MP controls</strong></td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>1,121</td>
<td>1,069</td>
<td>1,069</td>
<td>1,069</td>
</tr>
<tr>
<td><strong>Log Likelihood</strong></td>
<td>-1,593.434</td>
<td>-1,451.696</td>
<td>-1,442.576</td>
<td>-1,438.785</td>
</tr>
</tbody>
</table>

**Note:** Coefficient estimates from an ordered probit regression models with respondent satisfaction with MP as the dependent variable. Survey data described in main text. *** p < 0.01, **p < 0.05, *p < 0.1.
Table S.2 shows the results of an OLS regression when including the key predictor, perceptions of MP independence, as a categorical variable. Again, the key results are the same as those reported in the main paper. Specifically, as also shown in Figure S.2, the level of MP approval broadly increases as the perceived level of independence rises (Model 1), and this effect is stable when further controls are included (Models 2 and 3). (For Model 4, see Table S.3.)

**Table S.2: OLS regression models of satisfaction with local MP**

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.166***</td>
<td>1.741***</td>
<td>1.497***</td>
</tr>
<tr>
<td></td>
<td>(0.073)</td>
<td>(0.247)</td>
<td>(0.242)</td>
</tr>
<tr>
<td>MP independence: Fairly loyal</td>
<td>0.753***</td>
<td>0.682***</td>
<td>0.702***</td>
</tr>
<tr>
<td></td>
<td>(0.092)</td>
<td>(0.089)</td>
<td>(0.089)</td>
</tr>
<tr>
<td>MP independence: Neither</td>
<td>0.679***</td>
<td>0.777***</td>
<td>0.857***</td>
</tr>
<tr>
<td></td>
<td>(0.102)</td>
<td>(0.105)</td>
<td>(0.108)</td>
</tr>
<tr>
<td>MP independence: Fairly independent-minded</td>
<td>1.566***</td>
<td>1.471***</td>
<td>1.493***</td>
</tr>
<tr>
<td></td>
<td>(0.091)</td>
<td>(0.095)</td>
<td>(0.094)</td>
</tr>
<tr>
<td>MP independence: Very independent-minded</td>
<td>1.230***</td>
<td>1.282***</td>
<td>1.317***</td>
</tr>
<tr>
<td></td>
<td>(0.260)</td>
<td>(0.245)</td>
<td>(0.243)</td>
</tr>
<tr>
<td>MP independence: Don't know</td>
<td>0.515***</td>
<td>0.608***</td>
<td>0.702***</td>
</tr>
<tr>
<td></td>
<td>(0.084)</td>
<td>(0.090)</td>
<td>(0.093)</td>
</tr>
<tr>
<td>Voter-MP partisanship: Non-partisan</td>
<td>-0.111</td>
<td>-0.092</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.080)</td>
<td>(0.080)</td>
<td></td>
</tr>
<tr>
<td>Voter-MP partisanship: Co-partisan</td>
<td>0.350***</td>
<td>0.347***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.060)</td>
<td>(0.060)</td>
<td></td>
</tr>
<tr>
<td>Knowledge about MP</td>
<td></td>
<td></td>
<td>0.113***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.031)</td>
</tr>
</tbody>
</table>

**Note:** Coefficient estimates from a linear regression models with respondent satisfaction with MP as the dependent variable. Survey data described in main text. Standard errors clustered by respondent constituency. *** p < 0.01, **p < 0.05, *p < 0.1.
**Figure S.2: Effects of perceived MP independence on satisfaction with MP**

![Diagram showing the effects of perceived MP independence on satisfaction with MP.](image)

**Note:** Based on Model 2 in Table S.2. The dots indicate coefficient estimates from an OLS regression run on the survey data collected in Study 1, with standard errors clustered by constituency. Bars represent 95% confidence intervals.

Finally, Table S.3 and Figure S.3 present the results for the interaction between partisanship and perceptions of MP independence. As in the main paper, we can see that all three groups of voters – non-partisans, co-partisans and opposing partisans – respond positively to perceived MP independence. At the same time, there is some evidence that co-partisans react a little less positively than the other two groups.

Note that for these additional analyses we collapse two categories, ‘fairly’ and ‘very independent-minded’, due to the small number of respondents selecting ‘very independent-minded’. When we nevertheless re-run the regression model separating out the ‘fairly independent-minded’
and ‘very independent-minded’ categories of the perceived MP independence measure, the only noticeable difference in point estimates is that the effect of being ‘very independent-minded’ is smaller for non-partisan voters than for other types of voters. However, this estimate is unreliable because of the extremely small size (5) of the sub-sample used to estimate this effect.
Table S.3 OLS regression model of satisfaction with local MP: partisan conditionality

<table>
<thead>
<tr>
<th>Model Term</th>
<th>Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.366***</td>
<td>(0.239)</td>
</tr>
<tr>
<td>MP independence: Fairly loyal</td>
<td>0.766***</td>
<td>(0.110)</td>
</tr>
<tr>
<td>MP independence: Neither</td>
<td>1.027***</td>
<td>(0.151)</td>
</tr>
<tr>
<td>MP independence: Fairly/Very independent-minded</td>
<td>1.627***</td>
<td>(0.135)</td>
</tr>
<tr>
<td>MP independence: Don't know</td>
<td>0.829***</td>
<td>(0.123)</td>
</tr>
<tr>
<td>Voter-MP partisanship: Non-partisans</td>
<td>0.197</td>
<td>(0.162)</td>
</tr>
<tr>
<td>Voter-MP partisanship: Co-partisans</td>
<td>0.534***</td>
<td>(0.187)</td>
</tr>
<tr>
<td>Fairly loyal X Non-partisans</td>
<td>-0.558***</td>
<td>(0.216)</td>
</tr>
<tr>
<td>Neither X Non-partisans</td>
<td>-0.196</td>
<td>(0.250)</td>
</tr>
<tr>
<td>Fairly/Very independent-minded X Non-partisans</td>
<td>-0.412</td>
<td>(0.256)</td>
</tr>
<tr>
<td>Don't know X Non-partisans</td>
<td>-0.205</td>
<td>(0.214)</td>
</tr>
<tr>
<td>Fairly loyal X Co-partisans</td>
<td>-0.009</td>
<td>(0.218)</td>
</tr>
<tr>
<td>Neither X Co-partisans</td>
<td>-0.461*</td>
<td>(0.253)</td>
</tr>
<tr>
<td>Fairly/Very independent-minded X Co-partisans</td>
<td>-0.312</td>
<td>(0.230)</td>
</tr>
<tr>
<td>Don't know X Co-partisans</td>
<td>-0.310</td>
<td>(0.222)</td>
</tr>
<tr>
<td>Knowledge about MP</td>
<td>0.121***</td>
<td>(0.031)</td>
</tr>
</tbody>
</table>

Respondent controls: Yes
MP controls: Yes
Observations: 1,361
R²: 0.288

Note: Coefficient estimates from a linear regression models with respondent satisfaction with MP as the dependent variable. Survey data described in main text. Standard errors clustered by respondent constituency. *** p < 0.01, **p < 0.05, *p < 0.1.
Figure S.3 Effects of perceived independent-mindedness on satisfaction with MP, conditional on co-partisanship

Note: Based on a linear regression model which interacts perceived MP independence and respondent-MP partisanship, and includes all controls from Model 3 in Table 1. Standard errors were clustered by constituency. The dots indicate marginal effect estimates. Bars represent 95% confidence intervals.
Appendix C. Dissent and perceived MP independence

The OLS models reported in Table S.4 show that there is a positive and significant association between rates of actual MP legislative rebellion and perceived MP independence. The data comes from the survey conducted for Study 1. The dependent variable is respondent perception of how independent-minded their MP is, coded as a five-point scale running from ‘very party loyalist’ to ‘very independent-minded’ (see the main text for a description of the survey item). The key explanatory variable is the percentage of times an MP voted against the majority of their party for all House of Commons divisions in which the MP voted from the beginning of the 2010 Parliament to 18 February 2015 (based on data from publicwhip.org.uk). Due to the skewed distribution of this variable and the high number of zeros, we transform it by adding one and then taking the natural logarithm. We exclude respondents whose MPs were in Government payroll positions or in corresponding shadow positions for the Opposition, as these MPs are highly unlikely to have rebelled against their party. We also cluster standard errors by constituency.

Model 1 in Table S.4 shows that the frequency with which an MP votes against the party is a significant predictor of their constituents’ perceptions of how independent-minded they are. Model 2 shows that this association is robust to the MP and respondent controls included in our models in the main text. However, the substantive magnitude is not particularly strong. For example, in Column 2, the estimated coefficient on actual MP rebellion indicates that moving from being one of the least rebellious MPs (never voting against the party) to being a moderately rebellious MP (voting against the party 5% of the time) is associated with a 0.42 increase on the perceived MP independence scale. To place this in context, the latter scale varies from one to five and has a standard deviation of 1.2 in our survey sample.
Table S.4: Regression models of perceived MP independent-mindedness

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.348***</td>
<td>2.712***</td>
</tr>
<tr>
<td></td>
<td>(0.097)</td>
<td>(0.407)</td>
</tr>
<tr>
<td>Log(MP rebellion + 1)</td>
<td>0.161*</td>
<td>0.234**</td>
</tr>
<tr>
<td></td>
<td>(0.088)</td>
<td>(0.092)</td>
</tr>
<tr>
<td>Voter-MP partisanship: Opposing partisans</td>
<td>-0.209*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.120)</td>
<td></td>
</tr>
<tr>
<td>Voter-MP partisanship: Co-partisans</td>
<td>0.344***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.118)</td>
<td></td>
</tr>
<tr>
<td>MP tenure</td>
<td>0.004</td>
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</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td></td>
</tr>
<tr>
<td>MP age</td>
<td>0.0003</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0005)</td>
<td></td>
</tr>
<tr>
<td>MP degree</td>
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<tr>
<td></td>
<td>(0.128)</td>
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<tr>
<td>Majority size</td>
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<tr>
<td></td>
<td>(0.474)</td>
<td></td>
</tr>
<tr>
<td>MP female</td>
<td>0.210</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.134)</td>
<td></td>
</tr>
<tr>
<td>Respondent characteristics</td>
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<td></td>
</tr>
<tr>
<td>Observations</td>
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<td>645</td>
</tr>
<tr>
<td>R²</td>
<td>0.007</td>
<td>0.121</td>
</tr>
</tbody>
</table>

**Note:** Coefficient estimates from linear regression models with perceived MP independent-mindedness as the dependent variable. Survey data described in main text. Standard errors clustered by respondent constituency. *** p < 0.01, ** p < 0.05, * p < 0.1.
Appendix D. MP knowledge as a moderator of the MP independence-approval association

In the main paper, we find that MP independence is positively associated with satisfaction with MP even when controlling for MP knowledge. We argue that this controls for profile effects, so the extent to which voters approve more of independent-minded MPs simply because they are more familiar with them.

Another possibility is that MP familiarity moderates the impact of MP independence: it may be that only voters who are familiar with their local MP respond positively to perceived MP independent-mindedness. To test this, we include an interaction between perceived MP independence and knowledge of one’s local MP (a 3-point scale based on questions asking about voters’ MP’s sex, party and name). The results are shown in Table S.5. We can see that there is a positive effect of perceived MP independence even when knowledge is low. While the effect is predicted to increase as knowledge increases, this increase is not statistically significant. So, the effect of perceived MP independence is similar across levels of MP knowledge.
Table S.5 Interaction effect between perceived MP independence and MP knowledge

<table>
<thead>
<tr>
<th></th>
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<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.275***</td>
<td>1.072***</td>
</tr>
<tr>
<td></td>
<td>(0.341)</td>
<td>(0.355)</td>
</tr>
<tr>
<td>Perceived MP independence</td>
<td>0.319***</td>
<td>0.400***</td>
</tr>
<tr>
<td></td>
<td>(0.100)</td>
<td>(0.108)</td>
</tr>
<tr>
<td>Voter-MP partisanship: Non-partisans</td>
<td>-0.093</td>
<td>0.154</td>
</tr>
<tr>
<td></td>
<td>(0.094)</td>
<td>(0.216)</td>
</tr>
<tr>
<td>Voter-MP partisanship: Co-partisans</td>
<td>0.403***</td>
<td>0.798***</td>
</tr>
<tr>
<td></td>
<td>(0.072)</td>
<td>(0.187)</td>
</tr>
<tr>
<td>Perceived MP independence X Non-partisans</td>
<td>-0.103</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.088)</td>
<td></td>
</tr>
<tr>
<td>Perceived MP independence X Co-partisans</td>
<td>-0.159**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.064)</td>
<td></td>
</tr>
<tr>
<td>Knowledge about MP</td>
<td>0.040</td>
<td>0.050</td>
</tr>
<tr>
<td></td>
<td>(0.103)</td>
<td>(0.103)</td>
</tr>
<tr>
<td>Perceived MP independence X Knowledge about MP</td>
<td>0.042</td>
<td>0.040</td>
</tr>
<tr>
<td></td>
<td>(0.038)</td>
<td>(0.038)</td>
</tr>
<tr>
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<td>Yes</td>
</tr>
<tr>
<td>MP controls</td>
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<td>Yes</td>
</tr>
<tr>
<td>Observations</td>
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<td>1,069</td>
</tr>
<tr>
<td>R²</td>
<td>0.292</td>
<td>0.297</td>
</tr>
</tbody>
</table>

Note: Coefficient estimates from a linear regression models with respondent satisfaction with MP as the dependent variable. Survey data described in main text. Standard errors clustered by respondent constituency. *** p < 0.01, **p < 0.05, *p < 0.1.
Appendix E. Different-party versus same-party comparisons in Studies Two and Three

The full-sample AMCE estimates presented in the main text average over ‘same-party’ comparisons (where MP 1 and 2 have the same party affiliation, be that Conservative or Labour) and ‘different-party’ comparisons (where one MP is a Conservative and the other Labour). This raises a potential concern about these estimates: MP dissent may only be a relevant criterion for respondents when making same-party comparisons; faced with a different-party comparison, partisan considerations may overwhelm any other considerations about the other attributes of the individual MPs.

Therefore, as a robustness check, for both Study 2 and Study 3 we split our sample by same- and different-party comparisons and then repeat our analysis for each sub-sample. The results are presented in Figure S.4. This figure shows that, although MP dissent frequency has weaker effects when voters are forced to choose between a Labour and a Conservative MP, the effects are still statistically significant and substantial. For example, even in these different-party comparisons, MPs who spoke out or rebelled against the party leadership sometimes or often were on average more than 20 points more likely to be preferred to an MP who never does so.
Figure S.4: Popular preferences over frequency and type of MP dissent, same-party versus different-party comparisons in Study 2 (top) and Study 3 (bottom)
Appendix F: Full results of the conjoint analysis

The full results for all MP attributes included in the Study 2 and Study 3 conjoint analyses experiments are shown below in Figure S.5 and S.6; fuller versions of Figures 3 and 4 in the main paper are shown in Figures S.7 and S.8.

Briefly, these full results of the conjoint analyses can be summarised as follows. Regarding MP gender, the effect of this attribute is not clear: in our first experiment there is significant effect of gender; in the second experiment, a female MP is preferred on average, but only very slightly. Regarding tenure in parliament, there is only a very small effect of parliamentary experience in the first experiment: MPs who have 21 years in parliament are slightly preferred to MPs with just three years in parliament. Regarding MP party, Labour MPs are slightly preferred to Conservative MPs in both experiments. This finding is in line with poll results at the time of the surveys, which showed a small Labour lead. Finally, regarding MP time spent on constituency or national policy work, both experiments suggest that voters prefer MPs who spend at least two days on constituency work to those who just spend one day a week on that activity.
Figure S.5 Full conjoint analysis results (Study 2)

- **MP frequency of dissent**
  - Rarely vs. Never
  - Sometimes vs. Never
  - Often vs. Never

- **MP time spent on constituency work**
  - Two days vs. One day
  - Three days vs. One day
  - Four days vs. One day

- **MP parliamentary experience**
  - Ten years vs. Three years
  - Twenty-one years vs. Three years

- **MP sex**
  - Male vs. Female

- **MP party affiliation**
  - Labour vs. Conservative

Note: MP attributes are listed down the left hand side of each plot. Each bar compares the average support for MPs with one level of an attribute versus those with the baseline level of the attribute. The black lines show the 95% confident interval for each comparison.
Figure S.6 Full conjoint analysis results (Study 3)

Note: MP attributes are listed down the left hand side of each plot. Each bar compares the average support for MPs with one level of an attribute versus those with the baseline level of the attribute. The black lines show the 95% confident interval for each comparison.
Finally, the following to Figures show full versions of summary graphs shown in the main paper.

Figure S.7 presents a fuller version of Figure 3 in the main paper; Figure S.8 presents a fuller version of Figure 4 in the main paper.

**Figure S.7: Preferences over type of MP dissent do not strongly depend on partisanship**

![Graph showing preferences over type of MP dissent](image)

**Note:** Based on results from Study 2. The estimation sample is subset by respondent party ID (columns) and hypothetical MP party affiliation (rows). Each dot indicates the point estimate of dissent effects, relative to the baseline level of not speaking out. The bars represent the corresponding 95% confidence intervals.
Figure S.8: Preferences over frequency of MP dissent do not strongly depend on implied ideological congruence.

Note: Based on results from Study 2. The estimation sample is subset by respondent left-right self-placement (columns) and hypothetical MP party affiliation (rows). Each dot indicates the point estimate of dissent effects, relative to the baseline level of not speaking out. The bars represent the corresponding 95% confidence intervals.