# **Party Government and Policy Responsiveness**

# **Evidence from Three Parliamentary Democracies**

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## Abstract

Does party government moderate the responsiveness of public policy to public opinion? Analyzing a new dataset we examine whether the ability of governments to respond to the public on 306 specific policy issues in Denmark, Germany, and the United Kingdom is affected by the extent of coalition conflict and on the fit of the considered policy changes with government preferences. We find a systematic but relatively weak positive impact of public support on the likelihood and speed of policy change. Contrary to expectations, higher coalition conflict is not associated with fewer policy changes nor with weaker responsiveness to public opinion. Instead, changes that would move policy in line with the general policy preferences of the government are marginally more likely to be adopted. But we find no evidence that responsiveness to public opinion is weaker for policy changes that go against the preferences of the government.

## Introduction

In democracies public policy should reflect the wishes of the people. In representative democracies embodied in parliamentary political systems, however, public policy is made not directly by the people, but by elected representatives in legislative assemblies and cabinet governments. In general, regular, free and fair elections ensure that legislators and cabinet ministers have incentives to follow the policy wishes of the voters. But legislators and ministers are not passive transmitters of public opinion. First, they are typically members of political parties, and political parties need to govern responsibly (Bardi et al. 2014) and cater to the interests of their members, sponsors, and voters; thus, not necessarily to the positions of the median citizen. Second, in parliamentary systems parties often govern in coalitions. Coalitions might make it more likely that a broad set of public interests are represented in government, but they also erect significant hurdles to the adoption of new policies (Tsebelis 2002) and dilute perceptions of political responsibility (Duch et al. 2015). Third, voters do not hold strong, well-formed opinions on all policy issues, and they do not follow closely policy developments on all issues all the time (Achen and Bartels 2016). This provides leeway to legislators and ministers to choose when and on which issues to respond to the public. Altogether, the patterns of party government in parliamentary democracies have considerable potential to moderate the representation of public preferences into public policies<sup>1</sup>.

There are large literatures scattered across several subfields of political science and sociology that have studied policy representation, on the one hand, and the influence of party government on public policy, on the other. Research on policy representation (for recent reviews, see Wlezien and Soroka 2016; Erikson 2015; Shapiro 2011) has established that both in the US and in Europe public

<sup>&</sup>lt;sup>1</sup> Political parties and elites also shape and lead rather than only follow and mediate public opinion (Achen and Bartels 2016).

opinion has a strong but far from deterministic influence on public policy (see also Monroe 1998; Page and Shapiro 1983). This influence is manifested in relatively high degrees of static congruence (for a review of the concept, see Wlezien 2016) between what the median citizen wants and what the state of policy is (Lax and Phillips 2012), as well as in dynamic responsiveness, in which the state of public policy adapts to shifts in public preferences (Bevan and Jennings 2014; Jennings and John 2009; Wlezien 1995; Erikson et al. 2002). Researchers have also looked into the institutional factors that promote or inhibit responsiveness (Wlezien and Soroka 2012; Hobolt and Klemmensen 2008), but with inclusive results: there does not seem to be a single institutional recipe that ensures a high degree of correspondence between what citizens want and government delivers .

The literature on party government has examined the impact of party preferences on aggregate measures of the policy output of governments. Surprisingly, there is only scant and contested evidence for the effects of party positions on the direction of public policy shifts and the content of policy changes (Imbeau et al. 2001). Researchers have also investigated how the scope of differences in preferences between parties in government coalitions (Strøm et al. 2010) and between different institutional actors within the political system (Martin and Vanberg 2011; Tsebelis 2002) affect legislative production and policy output, and have found mostly negative effects (Saeki 2009; Schermann and Ennser-Jedenastik 2014; Bräuninger et al. 2015; Tsebelis 1999). Yet, very few studies of the policy effects of government preferences, coalition conflict, and related concepts, such as veto players and preference heterogeneity, take into account the possible influence of public opinion (but see Toshkov 2011).

It is theoretically plausible that public opinion and party government are not only competing drivers of policy change, but that they are also entangled in a complex relationship in which parties, legislators, and ministers shape, mediate, and moderate the influence of public opinion. Regrettably, scholars have rarely examined the effects of public opinion and party government on public policy simultaneously, especially when it comes to the case of parliamentary democracies. The existing empirical studies of the US suggest that public opinion, political preferences, and institutional rules interact in affecting the policy productivity of governments (Binder 1999; Coleman 1999), but these insights have not been translated and systematically tested in the context of parliamentary systems.

In this article we focus on the question how patterns of party government moderate policy responsiveness in three European parliamentary democracies: Denmark, Germany, and the United Kingdom (UK). We employ a comparative design in which we track a total of 306 policy issues across the three countries. For each of these issues, we identify measures of public opinion from representative national opinion polls, and we trace whether policy change on the issue occurred within a four-year period starting at the time of the opinion poll. We construct policy-specific measures of the preferences of the governing parties, and derive from them estimates of the conflict between coalition cabinet partners. We model two central aspects of policy making – the occurrence of policy change and the time it takes for change to occur. The timing of policy change has not played a prominent role in existing opinion-policy research, even though responsiveness is not only about whether politicians adopt policies in line with what the people want, but also about how fast they enact policy changes.

Analysing this data, we find that in all three countries public support significantly increases the likelihood of policy change and significantly decreases the time until change is enacted. Yet, whereas these effects are systematic, they are relatively small in substantive terms. Despite the possible danger that governments interested in sticking to their parties' positions or experiencing a high degree of coalition conflict may have higher difficulty responding to public opinion, we do not find evidence that these two factors weaken the opinion-policy linkage. Contrary to our theoretical expectations, we find that coalition conflict does not have a direct effect on the likelihood of policy change (nor on the time until it occurs), and that there is no moderating effect of coalition conflict on policy responsiveness as such. Furthermore, even though we encounter some relatively weak support for a positive effect of government support for a policy change on the likelihood of the change being adopted, there is no evidence that lack of support for a policy by a government decreases responsiveness to public opinion. From a normative point of view our findings can be interpreted as casting less of a negative view on the role of partisan preferences and coalition conflict on responsiveness than expected. However, they also underline that the complex relationship between patterns of party government and responsiveness may not be captured well by existing theory.

#### Public opinion, party government, and policy making in parliamentary democracies

A high degree of correspondence between the policy-relevant preferences, opinions, and attitudes of citizens, on the one hand, and the state of public policy, on the other, is a central, if not *the* central, normative requirement of liberal and democratic government (Przeworski 2010). The normative ideal of policy responsiveness is not absolute, and good reasons can be given why 'pandering' to public opinion might not be desirable in any single, particular case (e.g. Weissberg 2002). Nevertheless, no system in which there is systematic incongruity between what the public wants and what the government delivers can be defined as democratic.

Policy responsiveness is relevant in normative terms for direct and representative democracies alike, although the mechanisms through which it is organized in the latter are different. In representative democracies the influence of public opinion is typically exercised through a process of delegation in which the citizens elect representatives who share, express, and defend their views, and then the political representatives enact policies in line with the views that enjoy the support of the citizens. In the particular case of parliamentary democracy, political parties take central place in the process of representation. In addition to the electoral connection, mechanisms of political accountability ensure that political representatives, whether party members or not, have the incentives to reflect the views of the citizens in the process of government (Öhberg and Naurin 2016; Müller 2000). To be sure, representation is not a passive process: representatives help construct, articulate, and change the policy preferences of the represented, and sometimes need to go against the explicit wishes of a majority of the public for the sake of the common good and responsible governance (Bardi et al. 2014). But, again, gross and sustained mismatches between the wishes of the citizens and the policy actions of their representatives would signal a failure of representative democracy.

Empirically, there are similarly good reasons why we should expect to observe a link, albeit an imperfect one, between public opinion and public policy. First, in the electoral contest for political power, parties and individual candidates who express policy views more popular with the voters have a higher chance of being elected and hold office. In theory, in electoral systems based on majoritarian rules (plurality, single-member electoral districts), we should expect the winning party to represent the median citizen, at least on the policy issues of electoral significance<sup>2</sup>. In proportional electoral systems, the government as a whole, even if composed of different parties which represent particular groups within society, is also likely to represent a wide range of interests and preferences. Often, the median or compromise position of the governing parties would approach the median position of the citizens (Powell 2006; Coman 2015; McDonald et al. 2004; Blais and Bodet 2006) making policy responsiveness likely. Once elected, legislators and ministers are not bound by a narrow mandate to represent literally the policy preferences of their voters. But

<sup>&</sup>lt;sup>2</sup> In practice, issues such as limited party offerings and distortions of vote-to-seat transformations hamper the process of representation in majoritarian, single-member districts electoral systems (McDonald et al. 2004; Powell and Vanberg 2000).

they still have incentives not to stray too far away from the opinions of the electorate. Otherwise, they risk damaging the party brand and losing the confidence of their voters.

Responsiveness to public opinion may be less likely in a parliamentary than a presidential system (see e.g. Hobolt and Klemmensen 2008; Soroka and Wlezien 2010). But the risk of electoral loss should still give elected politicians incentives to pay attention to public wishes. Moreover, the risk that the public expresses its discontent through protests or civil disobedience should also encourage politicians to be attentive to the views of the public (Brooks and Manza 2006), in parliamentary and presidential systems alike.

It may be a fact that people do not hold strong, well-formed opinions on all policy issues and do not pay close attention to policy developments all the time (Achen and Bartels 2016). However, even if people do not have stable and meaningful *absolute* preferences about a policy, they might still have reasonably clear and politically consequential *relative* preferences about the direction and scale of desired policy change (Wlezien 1995). Hence, expressed public support for a particular policy alternative sends a strong signal and can only be ignored at a significant political cost. Therefore, our first set of theoretical expectations states:

*H1: The stronger the public support for a policy alternative, (a) the higher the likelihood of policy change and (b) the faster policy change will occur.* 

In parliamentary democracies public opinion is only one force of policy change amongst others, and its influence is mediated and moderated by the political system. In the discussion below we theorize about the expected direct and moderating effects of a set of variables that we collectively refer to as 'patterns of party government'. These variables have to do with (1) the extent of coalition conflict within cabinets, which in turn is related to the type of government (single-party or coalition; majority or minority) and (2) the general policy preferences (positions) of the government.

In coalition cabinets, which are a typical outcome of proportional electoral systems but occur under majoritarian rules as well, several different parties participate in government. It has been argued that coalition governments face significant hurdles in adopting new policies and legislation, because these have to win the consent of the coalition partners (see e.g. Martin and Vanberg 2011; Strøm et al. 2010). Theoretically, the set of policies that is preferred to the status quo decreases with increasing preference heterogeneity of the actors that need to agree to the policy change (Tsebelis 2002; König et al. 2010; Bräuninger et al. 2015). Therefore, fewer policy changes can be enacted the greater the distance in preferences between the coalition partners. It is important to note that the reduction of the set of feasible policy changes depends not on the *number* of coalition partners as such, but on the relevant preference distance among them (Tsebelis 2002). In sum, coalition conflict manifested in preference heterogeneity and polarization within a government decreases its policymaking capacity and the increases the likelihood of legislative gridlock.

Coalition conflict (preference heterogeneity) is non-existent for single-party governments under the usual assumption of parties as unitary actors. However, if the government party (or the government coalition) does not command the necessary majority of votes in the legislature to pass new policies and legislation (minority governments), the theoretically-relevant preference distance might need to take into account other actors (for example, parties) whose consent would be needed, even if formally these actors are not participating in government.

It should be noted that actual political systems differ in the way they organize the distribution of responsibilities between the coalition partners and the relative autonomy the members of the coalition enjoy within their sphere of responsibilities. But even where strong norms of ministerial autonomy exist, the most important policies are decided by the cabinet collectively and need the consent of the legislature, which brings back the relevance of the extent of coalition conflict for the possibility of policy change (Andeweg 2000; Martin and Vanberg 2014).

Greater coalition conflict and preference heterogeneity, more generally, have also been hypothesized to increase the time needed for new policies to be agreed upon even when policy change is feasible (Konig 2007; Rasmussen and Toshkov 2013; Martin and Vanberg 2004). Actors who have more divergent preferences need more time and negotiation rounds to discover common ground, reach a compromise, and arrange for the necessary side-deals that make a compromise possible. According to Martin and Vanberg (2005, 2004), the incentive to scrutinize the coalition partners increases with the ideological divergence within the coalition government, and parliamentary scrutiny also takes time. In sum, we expect that:

H2: The greater the extent of government coalition conflict, (a) the lower the likelihood of policy change and (b) the slower the policy change will occur.

The hypotheses above are rather standard in the literature on party government and have been tested extensively before, although typically in terms of aggregate policy measures, like legislative productivity and duration, rather than looking at concrete policy changes. What has been less theorized about is the possibly moderating effect of coalition conflict on policy responsiveness, or the link between public opinion and policy change. There are two aspects of this moderating effect. One deals with the willingness and the other one with the capacity of coalition governments to represent majority public opinion.

The capacity aspect was discussed above: to the extent that coalition conflict hampers governments to enact policy changes, it would also hamper their capacity to enact the changes that the median citizen supports. The flip side of this argument is that in times of high coalition conflict, only the policy changes that enjoy very strong support by the public would have a chance. Gilens (2012) explains how the difficulty of enacting policy change during times of high institutional gridlock in the US means that mostly policies with strong political support get adopted. Moreover, Coleman (1999) provides evidence that there is higher responsiveness to public opinion in periods of unified compared to divided government in the US (see also Binder 1999).

The incentives aspect of the moderating effect of coalition conflict is not so straightforward. Cabinets composed of more, and more diverse, parties are more likely to represent a broader range of societal interests, and the (weighted) average of the policy positions of the parties in the coalition would tend to approach the position of the median voter (Martin and Vanberg 2014). But to hypothesize whether coalitions would be more or less likely to enhance policy responsiveness than single-party governments, we have to take into account additional considerations. Theoretically, single-party majority governments are strongly expected to reflect the position of the median voter, provided that voters are policy motivated and there is a single relevant policy dimension. But a broad coalition might actually be more representative than a single-party majority government in the sense of being, on average, closer to the positions of the median voter when all policy dimensions are considered. However, if individual coalition parties can control autonomously particular policy domains, that might lead to more extreme policies being enacted than what the median voter would like.

In addition, once in power, coalition governments might face weaker incentives to respond to public opinion compared to single-party governments due to diffused responsibility (Duch et al. 2015). It is harder for people to judge the individual responsibility of parties part of a government coalition and to attribute the blame when the government fails to adopt policies that the majority favours. In turn, this decreases the pressure on individual parties to pander to public opinion, as the political cost of non-responsiveness is shared or avoided. Altogether, we hypothesize that:

H3: The greater the extent of government coalition conflict, the weaker the positive effect of public support for a policy alternative on (a) the likelihood of policy change and (b) the speed of policy change.

These hypotheses take into account the *differences* between the preferences of the governing parties, but not the preferences as such. In fact, we do not have many reasons to expect that the general ideological preferences of parties should affect the overall likelihood of policy change, unconditional on the content of the change. Only parties endorsing Conservatism as a political ideology might be expected to hold a general bias in favour of the status quo due to their ideological predispositions against social change, and then only if the traditional status quo has not already been moved in a more progressive direction by their predecessors.

However, one might expect that governing parties would be more likely to enact specific policy changes that agree with their general principles and party positions. In operational terms this implies that policy change should be more likely to occur when it is in line with the aggregate party positions of the governing parties. Despite the intuitive appeal of this reasoning, it has proved, in fact, quite difficult to demonstrate empirically a link between the general positions of parties in government and the content of policy changes they make (cf. the meta-analysis of Imbeau et al. 2001; and Schmitt 2016; as well as the more recent Knill et al. 2010). The contradictory empirical evidence and operationalization difficulties notwithstanding, it remains theoretically plausible that governing parties use their overall party positions as a shortcut and guide when it comes to taking a stance on specific policy proposals in order to maintain a consistent platform and protect their brand name vis-à-vis the electorate.

H4: Governments would be (a) more likely and (b) faster to enact changes that move policies in a direction that is consistent with their general party positions.

These expectations should be even stronger when public opinion supports policy alternatives that also coincide with the preferences of the parties in government. There is some empirical evidence for such a conditioning effect of the fit between the direction of policy change and the preferences of the government on the impact of public opinion (Petry and Mendelsohn 2004; Brettschneider 1996). For example, Brooks found that congruence on redistributive issues was higher for left-wing than right-wing governments in France and the UK (1985, 1987). Moreover, a recent experiment in Sweden provided evidence that party preferences may also constrain the extent to which individual politicians respond to requests from citizens by demonstrating that politicians are less responsive to requests which disagree with their party (Öhberg and Naurin 2016).

One of the reasons why policy responsiveness might not be perfect is precisely a clash of public opinion with what the government parties want, either due to ideological commitments or the need to cater to their own voters and sponsors (Petry and Mendelsohn 2004). In such cases, party preferences may constrain responsiveness. But when a policy change is supported by the public *and* it resonates positively with party preferences, there should be a very good chance of the policy being enacted. Moreover, the combined effect should be more than the sum of its parts. Assuming a heterogeneous set of policy alternatives, some of which require only popular support, some only party support, and some both popular and party support to get enacted, we arrive at theoretical expectations of interaction effects between public and party support:

H5: The positive effect of public support on (a) the likelihood and (b) speed of policy change should be stronger for policy changes that move policies in a direction consistent with the general party positions of the governments.

To sum up the theoretical discussion so far, we hypothesize direct effects of public support, coalition conflict, and government support for policy change on the likelihood and speed of policy change, as well as interaction effects between public opinion on the one hand, and coalition conflict, and government support for policy change, on the other hand. In the next section we explain how we design the empirical tests of these hypotheses.

#### Research design, data and operationalization

In general terms, our research design is based on a comparison of the speed and occurrence of policy change on a large number of policy issues across several national political systems. The countries we study – Denmark, Germany, and the UK – are all established parliamentary democracies that differ, however, in their characteristic patterns of party government. While single-party majority cabinets are common in the UK, multiparty coalitions are typical in Germany and in Denmark, where one also observes the phenomenon of multi-party *minority* coalition cabinets. During the time-period of our analysis, the extent of actual coalition conflict differed not only between the three countries, but also within the countries over time. For example, the UK experienced both a single-party majority cabinet and a two-party coalition, Germany went through several coalitions that varied in the range of preferences of the participating parties, and Denmark went through a number of successive coalitions, both majority and minority ones.

#### Unit of observation and sample selection

Our unit of observation is a policy issue in a country over time, and we analyse a total of 306 issues in the three countries. We look at *concrete* policy issues, rather than aggregate policy output measures or latent policy dimensions. For each policy issue, we identify public support for a policy alternative (call for public action) that relates to specific measures that the national politicians can enact. In line with existing research (Gilens and Page 2014; Gilens 2012) we then follow each of these issues from the time of the public opinion poll until the policy change is enacted or, if that does not happen, to a maximum of 48 months. Our focus on concrete issues has the advantage that we relate public opinion and public policy directly (Gilens 2012; Lax and Phillips 2009; Burstein 2014). By selecting a time window of up to four years, we allow ample time for new proposals to enter the legislative agenda and get adopted.

To select the policy issues we analyse, we started with identifying relevant questions asked in representative nationwide public opinion surveys in Denmark (1998-2010), Germany (1998-2010) and the UK (2001-2010). To be relevant, the questions had to tap into the attitudes of the adult population towards issues of public policy, to involve a call for future political action, and to relate to *specific* policy issues. In addition, the questions had to concern issues of *national* policy competences, and the responses had to be measured on a scale on which respondents expressed the extent to which they agreed or not with a given policy change.

We identified a total of 102 survey questions that fulfilled these criteria in Germany, 211 in Denmark, and 239 in the  $UK^3$ . In our final sample, we took all the 102 relevant questions in

<sup>&</sup>lt;sup>3</sup> In Denmark, all selected survey questions came from surveys conducted by the Gallup Institute. In Germany, we relied on questions from asked by the Politbarometer surveys. For the United Kingdom, we relied on a list of questions

Germany, and we used random sampling stratified by year to select 102 questions from Denmark and the UK each, for a total of 306 cases<sup>4</sup>.

In all three countries the selected survey questions cover a wide range of different policy issues and relate to different policy areas that represent diverse policy types (regulatory, (re)distributive and constituent policies). For instance, in the UK the sample includes questions concerning a possible amnesty to illegal immigrants, the introduction of an identity card system, and the replacement of university tuition fees with a graduate tax scheme.

Our sampling strategy is constrained by the availability of reliable public opinion data representative at the national level (Gilens 2012; Monroe 1998). As a consequence, our sample might be biased towards more salient issues that are more likely to get the attention of polling companies. The potential bias is not necessarily a problem since focusing on questions that have at least some amount of salience makes it "plausible that average citizens may have real opinions and may exert some political influence" (Gilens and Page 2014: 568). Still, it is worth reminding that our sample of issues might not be representative of the universe of all *possible* policy issues of national competence that could have been on the agenda<sup>5</sup>, despite the fact that it covers a broad range of policies in terms of type and domain.

from YouGov and ICM sampled by XX, which was further appended by additional survey questions from the mentioned companies

<sup>&</sup>lt;sup>4</sup> The sampling was necessitated by the high costs of data collection per policy issue and to a lesser extent by the need to keep the number of cases balanced across the three countries.

<sup>&</sup>lt;sup>5</sup> A recent US study on responsiveness addresses this challenge by sampling its cases from proposals on the legislative agenda rather than from available polls (Burstein 2014). However, constructing such a potential universe of issues is difficult in the context of a cross-country comparative study like ours, given that there is no comparative sampling frame of all possible issues that would be applicable to all three countries. Moreover, relying on national legislative

To further address the potential issue of non-representativeness, we measure and control for the media salience of all issues in our sample, and we note and control for whether policy change was already on the legislative agenda at the time of the public opinion poll. On salient issues it might be easier for policy makers to acquire information about public views and more costly to depart from them (Lax and Phillips 2012). Our sample covers issues of rather different salience within each of the three countries (with some issues not receiving any coverage in our newspapers at all), and only 51 of the 306 issues were related to an existing bill proposal or cabinet decision when the opinion question was asked. In sum, we can be confident that our sample includes issues of varying media salience and at various stages in the policy-making process.

#### **Outcome variables**

In the empirical analyses we study both the occurrence and speed of policy change, as two theoretically-relevant aspects of public policy making. In the first set of analyses we examine the likelihood of policy change (i.e. whether the national government or parliament adopted primary or secondary legislation in line with the public call for change) for each government that was in office within the observation period that we follow the policy debate on a given policy issue. In the second set of analyses we focus on the duration between the date of the public opinion survey and the date of the policy change, if it occurred within the four-year case-specific period of observation on the 306 issues. To detect the occurrence and timing of policy change we relied on historic information

databases or media in the three countries would only yield information about issues that have passed a first "threshold of access" by being picked up by either politicians or the media, which might create another source of bias.

provided by legislative databases, other government (web)sources, online newspaper archives, and information provided by interest groups and professional associations<sup>6</sup>.

## Explanatory variables

We operationalize public support for policy change as the percentage of all respondents in favour of the call for policy action as expressed in the public opinion survey. To further explore the possible effect of public opinion, we employ three additional operationalizations – majority public support (a dichotomous variable indicating whether the call for policy action enjoys the support of a majority of all respondents), net public support (a variable with a theoretical range between -1 and +1, defined as the share of respondents in favour of the call for policy action minus the share opposed), and public support calculated as the share of respondents in favour from those with an opinion (hence, excluding no responses and 'don't knows')<sup>7</sup>.

The measures of coalition conflict and government support for policy changes require that we obtain estimates of relevant government and party positions. To do that, we use the Chapel Hill expert survey of party positions (Bakker et al. 2015)<sup>8</sup>. We make the measures policy scale-specific:

<sup>&</sup>lt;sup>6</sup> Descriptive statistics of the variables used in the analysis are reported in the Supplementary Material (Table A1)., available as an online appendix to this paper.

<sup>&</sup>lt;sup>7</sup> The statistical models employing these alternative measures of public opinion are reported in Table A2 in the Supplementary Material.

<sup>&</sup>lt;sup>8</sup> We considered using the Manifestos Project data (Klingemann et al. 2007) as an alternative source of party and government positions. We obtained the necessary data and constructed measures on 10 scales constructed from the Manifesto items related to our policy issues. The data, however, failed face validity checks as it provided implausible estimates of party positions and relative ranking of the parties on scales and positions (details available upon request).

first we classify each of the 306 policy issues to one of the three main scales (or dimensions) in the Chapel Hill dataset – general left/right, economic left/right and GAL-TAN (green, alternative, and liberal vs. traditional, authoritarian and nationalist), then we identify the relevant party positions on these scales and assign them to the case, and finally we compute the coalition conflict and government support measures.

Coalition conflict is operationalized as the absolute distance between the positions of the two most extreme government parties (Tsebelis 2002; Hartmann 2015; König et al. 2010) on the relevant policy scale<sup>9</sup>. Government positions are operationalized as the weighted average of the positions of the parties in government, with the weights corresponding to the relative shares of the seats in the legislature held by the coalition party from the total number of seats held in the legislature by all coalition partners<sup>10</sup>. To obtain a measure of relative government *support* for policy change from absolute government *positions*, we have to consider the *direction* of policy change for each case. To that end, we first code the implied direction of each policy change (e.g. left or right),

Hence, we decided against reporting results based on this data source, which is more appropriate for measuring party attention to particular issues rather than positions as such.

<sup>9</sup> The Danish case presents a theoretical challenge for the measurement of average government positions and coalition conflict because of the minority status of the cabinets in the country during our period of observation. Taking into account only the parties formally part of the (minority) coalition might underestimate the degree of intra-government conflict and misrepresent the average government position since the governing parties need the support of additional parties in the legislature to pass legislation. At the same time, minority coalitions have flexibility in choosing a partner in the legislature for particular policy proposals that is not easily captured. Nevertheless, we constructed alternative measures of government positions and coalition conflict in Denmark that take into account the unofficial but regular legislative partners of the parties in the governing minority coalitions. The results based on these alternative measures can be found in Table A2 in the Supplementary Material.

<sup>10</sup> For easier interpretation, the original scales, which range from 1 to 10, are centered at zero.

and then we invert the original government positions where needed, so that more right wing parties are aligned with right-leaning policy changes and left wing parties with left-leaning changes<sup>11</sup>.

In addition to these main variables of interest, we include a variable that indicates whether the call for public action was related to an existing bill proposal or a cabinet decision when the public opinion question was asked, because such cases could have a higher likelihood of policy change. Also, we measure the media saliency of each case by tracking the number of newspaper articles related to the case in one major national newspaper in each country (*Politiken* in Denmark, *Sueddeutsche Zeitung* in Germany, and *The Guardian* in the UK) in the period between one month prior and one month after the public opinion survey was conducted.<sup>12</sup> All empirical models reported below include country fixed effects (dummies) in order to control for unobserved country-level heterogeneity in the likelihood of occurrence of policy change and in the duration until change occurs. Because in the logistic regression models the unit of analysis is a government spell (a period of time during which a government is responsible for a policy issue), we also include as a control the remaining formal tenure of the government (in months) from the moment of its inauguration or

<sup>12</sup> The Boolean media keyword search was conducted using the FACTIVA database. A complete list, including all Boolean search requests, for all the 306 survey questions will be provided by the authors on request. The keywords represent the respective items as accurately as possible while paying attention to the scope of the policy item. We included the plurals of the selected key words, their word stems, and their synonyms. The media count for each country is standardized, i.e. the variable is rescaled to have a mean of zero and a standard deviation of one in each country. By measuring issue coverage within a fixed two month period, we avoid bias resulting from the fact that opinion items which experience a policy change receive higher media attention in the time period before the actual policy change occurs.

<sup>&</sup>lt;sup>11</sup> For example, if the call for action concerned increasing taxation (left-leaning policy change), we inverted the position scores of the relevant government, so that higher scores would be associated with more economically left-wing positions (on the original scales, higher scores are associated with more right/TAN positions).

the date of the public opinion survey (whichever comes last) to the moment of its expected dissolution or the end of our observation period (whichever comes first).

#### **Empirical analyses**

#### Public opinion and policy change

We present a detailed analysis of the bivariate relationships between public opinion and policy change in the Supplementary Material (Figures A1 and A2 and the associated text). In summary, in all three countries the likelihood of policy change increases with higher levels of public support, both absolute and net. In substantive terms, however, the effect of public opinion is relatively small. We also observe rather modest levels of congruence between policy and majority public opinion at the beginning of the observation period, and even more modest levels of improvements in congruence over time, despite a considerable degree of policy-making activity<sup>13</sup>.

#### Multivariate logistic regression models

Table 1 presents the results of a series of multivariate logistic regression models of the likelihood of policy change within a period of four years following the polling of public opinion on a call for policy action for each government that was in office within the observation period. Model 1 includes the main variables of interest and the controls, but no interactions. Model 2 adds the

<sup>&</sup>lt;sup>13</sup>We should not that the positive effect of public opinion on the likelihood on policy change does not appear to be linear, but the exact form of the relationship differs across the three countries and does not follow a simple interpretable pattern (for details, see Figure A2 in the Supplementary Material). The non-linearity is less pronounced in a multivariate setting, however.

interaction between coalition conflict and public opinion. Model 3 adds the interaction between government support and public support.

The effect of public support is consistently positive, and it is statistically significant in Models 1 and 3 at the 5% level. In substantive terms the effect is relatively small: for an increase of public support for a policy from 50% to 60%, the coefficients from Model 1 imply that the likelihood of policy change increases with 2.2 percentage points (other covariates held constant at their means or typical values).

	Model 1	Model 2	Model 3
Public support	1.44 (0.56) *	1.30 (0.89)	1.48 (0.56) **
Coalition conflict	-0.02 (0.10)	-0.02 (0.09)	-0.02 (0.10)
Public support*Coal. conflict	/	0.08 (0.43)	/
Government support	0.15 (0.09)	0.15 (0.09)	0.16 (0.09)`
Gov. support* Public opinion	/	/	-0.32 (0.42)
Media saliency	0.32 (0.10) **	0.32 (0.10) **	0.33 (0.10) **
Existing proposal	0.95 (0.29) **	0.95 (0.29) **	0.96 (0.29) **
Remaining months	0.04 (0.01) ***	0.04 (0.01) ***	0.04 (0.01) ***
Denmark	0.35 (0.32)	0.35 (0.32)	0.33 (0.32)
United Kingdom	-0.92 (0.35) **	-0.92 (0.35) **	-0.92 (0.35) **
Intercept	-3.02 (0.50) ***	-3.02 (050) ***	-3.02 (0.50) ***
AIC	516.31	518.27	517.75

Table 1. Logistic regression models of policy change

Notes: Logistic regression models (with logit link). Dependent variable: occurrence of policy change. Unit of analysis is a government spel; N=525. Unstandardized and unexponentiated coefficients. Public opinion centered at 0.5. Government positions centered at 5.0. Media saliency is logged. Significance levels: 0 < \*\*\* < 0.001 < \*\* < 0.01 \* < 0.05 ` < 0.1

The analysis provides no evidence that policy change is more likely under governments composed of parties with relatively similar positions or under single-party governments. Coalition conflict has no significant effect across the model specifications, which, to remind, include country fixed effects (see also Figure A2 in the Supplementary Material). According to Model 2, there is also no interaction between public support and coalition conflict. Inspecting the interaction visually confirms this inference and shows that even when coalition conflict is set at the minimum and maximum observed values, the confidence intervals for the effect of public opinion under these two scenarios overlap for the entire range of public opinion (see Figure A3)<sup>14</sup>.

Government support for the policy proposal has a positive effect that is close to statistical significance (the p-value of the effect in the three models ranges between 0.09 and 0.11). According to Model 3<sup>15</sup>, the interaction between public and government support is, contrary to expectation, negative, although non-significant at the 95% level. When we plot the interaction, we can see that the sensitivity of the likelihood of policy change on the level of public support is stronger for policy changes that *lack* government support and is rather flat for policies that enjoy government support. Similarly, the effect of government support on the likelihood of policy change is rather steep for policy changes that lack public support, but non-existent for polices that enjoy public support (Figure A5 illustrating these effects is to be found in the Supplementary Material). Overall, these findings do not present evidence that policy responsiveness to public opinion is less likely on policy

<sup>&</sup>lt;sup>14</sup> When we use the alternative operationalizations of coalition conflict and government support that take into account the unofficial partners of the governing parties in the minority Danish cabinets, we find essentially the same results.

<sup>&</sup>lt;sup>15</sup> In Table A2 in the Supplementary Material we report versions of Model 3 that include robust (A7) or clustered standard errors (A8) and a multi-level specification with the policy issue (case) as a second level of analysis (A6). The inferences remain essentially the same.

issues that would move policy in a direction opposite to the general party positions of the government<sup>16</sup>. If anything, public support for a policy seems to matter more when the policy changes are *not* in line with the preferences of the government. If we take the results of Model 3 and Figure A5 seriously despite the lack of formal statistical significance, it would appear that a policy change has a very similar chance of being adopted (a) under a supportive government irrespective of its level of public support and (b) under an opposing government but only if it enjoys very high levels of public support.

Finally, we should note that the three control variables have the expected effects in Models 1-3: the formal time of a government remaining in office, the prior existence of a government bill and media salience all increase the likelihood of policy change. The existence of a bill makes it more than 2.5 more likely that policy change will follow. Doubling the number of newspaper articles on a topic (salience) is associated with a 40% higher risk of policy change, and each additional month in office adds approximately a 4% increase in the odds. But importantly in light of existing literature that has emphasized the potential role of salience in moderating the impact of public opinion on policy change, there is no evidence for an interaction between salience and public support in our dataset (model not shown).

<sup>&</sup>lt;sup>16</sup> Interestingly, while government *support* for policy change as such has a rather weak and only marginally significant positive effect, the *absolute* position of the governments appears to be negatively and significantly associated with the likelihood of policy change. That is, more right and nationalist (TAN) governments area associated with a lower likelihood of policy change, irrespective of the implied direction of policy change. In addition, they appear to be less responsive to public opinion as well: there is some marginal evidence for a negative interaction between public support and government positions (for details, see Model A5 in Table A2 in the Supplementary Material).

#### Event history models of policy-making duration

The analyses so far focused on the question whether policy change occurred at all within a four-year period after the public opinion survey was conducted. The speed of policy change, however, is another important aspect that deserves attention in its own right<sup>17</sup>.

Table 2 presents the results of three Cox proportional hazards models with time-varying measures of government positions and coalition conflict<sup>18</sup>. Model 4 has the main effects of interest, while Models 5 and 6 add the two interactions – between coalition conflict and public support and between government support and public support, respectively. The findings are very similar to the logistic regressions of the likelihood of policy change presented above. Public support has a consistently positive and significant (in Models 4 and 6) effect on the hazard of policy change (hence, it is associated with shorter durations until change occurs). Coalition conflict has no effect, while the main effect of government support is positive and marginally significant leaving some evidence that policy changes in line with the general positions of the government tend to occur faster.

Similarly to Model 3, Model 6 reports a negative interaction between government and public support, which is however not significant. In any case, given that our hypothesis predicted a positive interaction, it is safe to say that the empirical analysis does not find support for this hypothesis.

<sup>&</sup>lt;sup>17</sup> In addition, the event history analysis can address the complication that for many of our cases the observation time is censored at four years, which of the length of time we followed each policy issue in line with the approach of Gilens (2012) and Gilens and Page (2014).

<sup>&</sup>lt;sup>18</sup> We explore in more detail the impact of the individual variables on the timing of policy change in Figures A6, which presents the Kaplan-Meier survival curves, and the associated text in Supplementary Material.

	Model 4	Model 5	Model 6
Public support	0.95 (0.46) *	0.78 (0.78)	1.04 (0.45) *
Coalition conflict	0.03 (0.09)	0.02 (0.09)	0.02 (0.09)
Government support	0.11 (0.07)'	0.11 (0.07)'	0.13 (0.07)'
Public support*Coalition conflict	/	0.11 (0.38)	/
Public support*Government support	/	/	-0.32 (0.31)
Media saliency	0.26 (0.09) **	0.26 (0.09) **	0.27 (0.09) **
Existing proposal	0.79 (0.22)***	0.79 (0.22)***	0.81 (0.21) ***

#### Table 2. Cox Proportional Hazards models with time-varying covariates

Notes: Cox Proportional Hazards models with time-varying covariates. Dependent variable: occurrence of policy change on a policy in a month. N=10815. The models are stratified by country and clustered by case id. Unstandardized and unexponentiated coefficients. Public opinion centered at 0.5. Media saliency is logged. Significance levels: 0 < \*\*\* < 0.001 < \*\* < 0.01 \* < 0.05` < 0.1

#### Conclusion

Recent years have witnessed an expansion of the study of responsiveness to a broad range of political systems and a new research agenda has started exploring how contextual differences in institutional architectures might contribute to explaining varying degrees of opinion-policy linkage (Wlezien and Soroka 2012; Lax and Phillips 2012; see e.g. Hobolt and Klemmensen 2008). At the same time, other contextual factors that may affect responsiveness, such as the impact of cabinet politics and coalition governance, have received less attention. By linking literature on political responsiveness, party government and coalition conflict, we identified a number of hypotheses how government positions and coalition conflict could not only impact policy making directly, but also moderate the degree of policy responsiveness.

We found a systematic but substantially rather small degree of policy responsiveness in the three parliamentary political systems examined. In Germany, despite a considerable amount of policy activity on the set of cases, the probability of policy change was not strongly affected by the degree of public support and, as a result, overall congruence between the wishes of the majority and the state of policy hardly improved over a four-year observation period. Responsiveness was higher in the case of the UK, but coupled with a rather stronger status quo bias of the British policymaking system this also did not produce a high degree of congruence between policy and majority public opinion. In Denmark, moderate responsiveness and relatively high degree of policy-making activity produced the highest degrees of congruence we observed, although in absolute terms congruence was still disappointingly low.

The fact that Denmark – governed by minority coalitions throughout our study period – exhibited the highest ability to produce policy change, while the UK – governed for a large part of the observation period by a single party majority government – experience the least amount of policy change already spelled trouble for the hypothesis that the extent of coalition conflict significantly affects policy-making capacity and, indirectly, responsiveness. Accordingly, we found no evidence that coalition conflict has a negative effect on policy adoption or that it moderates policy responsiveness. The lack of an effect of coalition conflict<sup>19</sup> on policy-making capacity is unexpected, although in hindsight we can evoke reference to the concept of ministerial autonomy to

<sup>&</sup>lt;sup>19</sup> In line with existing literature, our measure of coalition conflict is based on the maximum distance between the coalition partners in a government and, as such, disregards the relative power of the different coalition partners. It could be that a measure that takes into account not only the preference distance but the distribution of power as well would capture better the theoretical concept. The construction of such a measure is, however, nontrivial as there are multiple ways in which preference distance and power distribution can be combined to produce a single measure.

rationalize the null result (Martin and Vanberg 2014; e.g. Laver and Shepsle 1994). And perhaps the fact that coalition government are more likely to represent the societal median (Blais and Bodet 2006; Powell and Vanberg 2000) compensates for their allegedly diminished capacity for policy change, so that responsiveness remains similar overall. Moreover, it needs to be remembered that even if holding governments to account may more difficult in countries with frequent coalition governments, coalition governance does not only make it harder for governments to act on popular policies, but may also prevent them from adopting unpopular ones in practice (Gilens 2012). If these two effects counterbalance each other, we would not expect coalition conflict to affect responsiveness.

We also found no support for the hypothesis that there should be a positive interaction between government support for policy change and public opinion, when they coincide. This implies that responsiveness is not constrained when the policy proposals on the agenda run counter to the general policy positions of the parties. We did not find evidence that responsiveness is weaker on issues that move policy in the opposite direction to the general preferences of the government. If anything, it would appear that government and public support are substitutes, so that public support for policy change matters more when the policy does not enjoy government support, and government support for policy change matters more when the policy change is not favoured by the public. Instead of strong effects of relative government support, our analyses hint that the absolute government positions might have an independent impact on the probability of policy change. Governments with positions located towards the right/TAN ends of the relevant policy scales appeared to be less likely to enact policy changes and less responsive to public opinion.

Altogether, we do not find much evidence that patterns of party government in Western Europe weaken policy responsiveness. Moreover, while responsiveness in our examined countries is rather low in absolute terms, neither coalition heterogeneity nor discrepancy between an issue and the aggregate policy positions of the parties lower the likelihood that governments respond to public opinion. Future research should extend our study of responsiveness to other parliamentary systems with strong parties. While it is reassuring to also find signs of responsiveness in such systems, the complex relationships between coalition conflict, partisan preferences, and responsiveness in these contexts deserve further scrutiny.

A promising approach for such research would be to use direct measures of party preferences related to specific issues. Our study already improves on existing literature by linking public policy, public opinion and government positions on three different scales, rather than simply using general left-right ideological positions as proxies for government preferences. But there could be advantages of looking into even more concrete party positions on policy issues in order to disentangle the effects of government preferences on policy changes and responsiveness.

There is also scope for extending our research to studies of the dynamic relationship between opinion and policy over time in Western European parliamentary democracies. As mentioned, responsiveness is likely to be a reciprocal relationship, in which both opinion and policy adapt to each other. In a study of a high number of different issues like ours, examining the dynamic relationship is not possible due to the limited availability of repeated opinion polls on the same specific topic in the examined countries. By focusing on specific issues, we address one of the criticisms of studies linking general measures of opinion and policy when it comes to assessing causality. They face the potential challenge that the issues used to construct the aggregate opinion and policy measures may not be the same (Lax and Phillips 2012; Burstein 2014). Instead, our approach gives us confidence that the public has expressed its attitudes towards the same policies as the ones for which we measure policy outcomes. However, future research should complement our research by scrutinizing the reciprocal linkage between opinion and policy further in studies of the

small subset of specific policy issues for which time series data is available and by relying on qualitative and experimental methods.

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# **Appendix (Supplementary Material)**

## **Contents**

- 1. Descriptive statistics (Table A1)
- 2. Public opinion and policy change: descriptive and bivariate analyses (Figures A1 and A2)
- 3. Coalition conflict and policy change and responsiveness (Figures A3 and A4)
- 4. Additional logistic regression models of policy change (Table A2)
- 5. Additional figures illustrating the interaction effects (Figures A5)
- 6. Time until policy change: bivariate analysis (Figure A6)

# 1. Descriptive statistics

## Table A1. Descriptive statistics

	Minimum	Mean	Median	Maximum	St. dev.
Public support	0.04	0.51	0.52	0.97	0.21
Net public support	-0.90	0.12	0.17	0.96	0.40
Media salience	0.00	10.66	4.00	153.00	18.38
Duration of policy change (in months);	0.00	14.07	10.00	46.00	13.54
censored at 48 months	0.00	14.97	10.00	40.00	15.54
Coalition conflict	0.00	1.47	0.94	4.09	1.32
Government preferences	3.27	5.33	5.07	7.63	1.22

	Distribution
Existing proposal [yes/no]	17%/83%
Direction of policy change [right/left]	56%/44%
Policy change [yes/no]	39%/61%
Policy scale [general LR/econ./GALTAN]	38%/45%/18%

#### 2. Public opinion and policy change: Descriptive and bivariate analyses



Figure A1. Public opinion and policy change in Western Europe: responsiveness and congruence

The top two panels of Figure A1 show how the likelihood of policy change varies with the percentage support for policy change (top-left) and with net public support for policy change (top-right). The lines for each of the three countries are based on the estimates from country-level logistic regression models of policy change regressed on public support and net public support, respectively. Clearly, in all three countries the likelihood of policy change increases with higher levels of public support, both absolute and net.

The strength of responsiveness is greatest in the UK and smallest in Germany. In substantive terms, however, the effect of public opinion is relatively small – for a change in the share of the public supporting policy change from 0 to 1 (a rather unlikely change), the likelihood of the government adopting the policy only shifts from 37% to 54% in Germany, from 34% to 61% in Denmark, and from 10% to 30% in the UK. For an increase in public support of 10 percentage points (still large, but more realistic), the likelihood of policy change increases with around 1.6 percentage points in Germany, around 2.6 percentage points in Denmark, and with around 3 percentage points in the UK. Also, note that the lines cross the y-axis at rather high points meaning that policy change has a substantial chance of happening even in the complete lack of public support.

The positive relationship between public support and the likelihood of policy change is not statistically significant in the country-level models without additional covariates. It is also worth noting that a policy change needs to enjoy at least 60% public support in Denmark and 80% in Germany to have a 50% or higher chance of being enacted within the next four years. In the UK sample, the bias towards the status quo is even more pronounced with policy change having an estimated maximum likelihood of only 42% even with maximum public support.

Another way to explore the relationship between public opinion and policy change is to examine the percentage of policies that are congruent with majority public opinion (meaning that the policy status quo at the time has the support of the majority of the public). The bottom-left panel of Figure A1 tracks average congruence for each country over our four-year period of observation. The three countries start with similar levels of congruence at the time when the opinions polls are taken (with public support favouring the status quo in 41% in Denmark and the UK and 48% in Germany). Over time, congruence rises to 50% in the UK, to 51% in Germany, and to 61% in Denmark. In sum, for the set of policy issues in our sample, four years after the initial call for public action congruence with public opinion is present in around half of the cases in Germany and the UK and round 3 out of 5 cases in Denmark.

These very modest levels of congruence between policy and majority public opinion and even more modest levels of improvements in congruence over time happen despite a considerable degree of policy-making activity, as evidenced in the bottom-right panel of Figure A1. The plot shows the share of policies in the sample that experienced policy change (no matter whether favoured by public opinion or not) over four years. In the UK, around one quarter of the policies in the sample are changed within our period of observation; in Germany and Denmark, a little less than half. This implies that while policy change occurs frequently, it often goes against majority public opinion, and it does not necessarily happen for all policies that have majority support.

The varying rates of policy change across the three countries evident in the plot also explain how the UK can be the most responsive to public opinion and the least congruent at the same time. While the overall level of policy-making change in the UK is low, when change happens, it is relatively responsive to public opinion support. On the contrary, Germany changes relatively many of its policies, but the ones that lack public support are almost as likely to be changed as ones that enjoy the support of the majority.

The analysis so far implicitly assumed that the effect of (net) public opinion is linear (on the scale of the predictor) in the logistic regression curves presented in the top two panels. It turns out that the effect is more complex than that. Figure A2 plots the predicted effect of public support (left panel) and net public support (right panel) on the likelihood of policy change as estimated by the non-linear local polynomial regression fitting (loess) function.

Figure A2. The relationship between public opinion and policy change



The solid black lines show the effect in the combined dataset while the dotted lines show the effect in models estimated on country-specific data. In the general case, it appears that as public support for policy increases from 0 to about 20% (and net support increases from -1 to about -0.5), the probability of policy change grows. However, between 20% and 50% support (and between -0.5 and +0.1 net support), the probability of change slightly decreases. Once support passes the 50% threshold (and +0.1 net support), the probability of policy change starts to increase again, but then for very high values of support, it decreases once more. The patterns differ somewhat among the three countries and given the relatively small sample size (especially at more extreme values of public opinion), we should be careful not to overinterpret these results. But they remain suggestive as to the non-linearity of the effect of public opinion on policy change. Because the form of the effect does not match a simple polynomial function (such as quadratic or log), we do not attempt to model it in the multivariate models we present below. As a precaution to nonlinearity, we also estimate the multivariate models with the public support variable dichotomized at the 50% mark.

We should also note the difference between the effects of (absolute) public support and net public support. While the effect on policy change of both these variables is positive, there is an important subtlety. When we dichotomize public support into just two categories (above and below 50%), the observed frequency of policy change is higher when a majority of the public supports policy change (43% vs. 33%), in line with theoretical expectations. However, the conclusion changes when we consider *net* public support. If we just dichotomize net public support into less than 0 (hence, net opposition) and above zero (hence, net support), the observed frequencies of policy change are almost exactly the same. This implies that when an absolute majority of public support is absent but the percentage of the public supporting the policy is still larger than the percentage opposing it, no policy change happens (from the 23 cases where there is no majority support but still there is net public support, 21 experience no policy change and only 2 do). In sum, it is not so much the *relative* share of policy supporters versus opponents that matters for the likelihood of policy change, but the *absolute* share of supporters from all citizens (including those without strong opinions on the issue).

# 3. Coalition conflict and policy change

Figure A3. Coalition conflict and policy change in Western Europe



Figure A4. The interaction effect between coalition conflict and public support for change



## 4. Additional logistic regression models of policy change

## Table A2. Additional logistic regression models of policy change

Model A1 replaces the public support variable with a measure of *net* public support instead. Model A2 uses an alternative measure of public support calculated as percentage from respondents excluding 'don't knows'. Models A3 and A4 replicate Model 2 and 3, respectively, but with measures of coalition conflict and government preferences that take into account unofficial coalition partners of the Danish minority government parties.

	Model A1	Model A2	Model A3	Model A4
Public support	0.80 (0.30) **	1.42 (0.55) **	1.35 (1.00)	1.44 (0.56) **
Coalition conflict	-0.02 (0.10)	-0.02 (0.10)	0.00 (0.09)	-0.01 (0.09)
Public support*Coal. conflict	/	/	0.01 (0.37)	/
Government support	0.16 (0.10)`	0.17 (0.10)`	0.11 (0.08)	0.11 (0.08)
Gov. support*Public support	-0.09 (0.22)	-0.23 (0.41)	/	-0.34 (0.40)
Media saliency	0.32 (0.10) ***	0.32 (0.10) ***	0.33 (0.10) ***	0.33 (0.10) **
Existing proposal	0.97 (0.29) ***	0.96 (0.29) ***	0.98 (0.29) ***	0.99 (0.29) ***
Remaining months	0.04 (0.01) ***	0.04 (0.01) ***	0.04 (0.01) ***	0.04 (0.01) ***
Denmark	0.30 (0.32)	0.30 (0.32)	0.39 (0.31)	0.37 (0.31)
United Kingdom	-0.99 (0.35) ***	-0.99 (0.35) ***	-0.88 (0.34) **	-0.88 (0.34) **
Intercept	-3.07 (0.50) ***	-3.07 (0.50) ***	-3.09 (0.48) ***	-3.10 (0.49) ***
AIC	517.30	518.20	519.38	518.68

Notes: Logistic regression models (with logit link). Dependent variable: occurrence of policy change. Unit of analysis is a government spel; N=525. Unstandardized and unexponentiated coefficients. Public opinion centered at 0.5. Government positions centered at 5.0. Media saliency is logged. Significance levels: 0 < \*\*\* < 0.001 < \*\* < 0.01 \* < 0.05 ` < 0.1

Model A5 adds the absolute level of government positions and an interaction with public support. Model A6 is a multi-level model with random effets at the policy issue (case) level. Model A7 replicates Model 3 with robust standard errors and Model 8 with standard errors clustered at the policy issue (case) level.

	Model A5	Model A6	Model A7	Model A8
Public support	1.69 (0.58) ***	1.71 (0.70) *	1.48 (0.56) **	1.48 (0.58) **
Coalition conflict	-0.05 (0.10)	0.10 (0.10)	-0.02 (0.09)	-0.02 (0.10)
Government support	0.16 (0.09)`	0.25 (0.11) *	0.16 (0.09)`	0.16 (0.09)`
Gov. support*Public support	/	-0.51 (0.51)	-0.32 (0.41)	-0.32 (0.41)
Government positions (right)	-0.17 (0.10)`	/	/	/
Gov. positions*Public support	-0.82 (0.45)`	/	/	/
Media saliency	0.32 (0.10) ***	0.35(0.11) ***	0.33 (0.11) ***	0.33 (0.11) ***
Existing proposal	0.96 (0.29) ***	1.21 (0.41) ***	0.96 (0.29) ***	0.96 (0.31) ***
Remaining months	0.04 (0.01) ***	0.04 (0.01) ***	0.04 (0.01) ***	0.04 (0.01) ***
Denmark	0.50 (0.33)	/	0.33 (0.33)	0.33 (0.34)
United Kingdom	-0.90 (0.36) ***	/	-0.92 (0.34) **	-0.92 (0.35) **
Intercept	-3.08 (0.50) ***	-3.52 (0.54) ***	-3.03 (0.49) ***	-3.03 (0.50) ***
AIC	513.36	530.30	519.38	519.38

#### 5. Interaction effect between public and government support



Figure A5. The interaction effect between public opinion and government support

The interaction effect is based on the estimates of Model 3 in the main text. The shaded regions indicate 75% (thus, *not* the more usual 95%) confidence limits. On the left panel, public opinion runs from no support to full support on the x-axis and the two regression slopes are drawn for issues with (+3) and without government support (-3). On the right panel, government support run from -3 to 3 on the x-axis and the two regression slopes for the effects on policy change (represented on the y-axis) are drawn for issues that have total public support and no support at all.

# 6. Time until policy change: bivariate analysis





The plots trace the share of non-adopted proposals for different subgroups of cases over each month of the observation period (up to 48 months). Note that the starting observation date for each case – the date of the opinion poll – is to some extent arbitrary. However, there should be no systematic bias across the major variables of interest in terms of the starting dates. The different panels of the figure show the survival curves for cases with majority public support or not; decided under left/GAL and right/TAN governments; with implied policy direction consistent with the government position or not; under higher or lower than average coalition conflict; for cases with pre-existing bill or not, and for cases of higher or lower than average salience. The steeper the slopes of the lines, the faster the specific types of cases represented by the lines get adopted. The greater the distance between the two curves on each plot, the bigger the difference in the relative share of adopted cases from the two respective groups of cases at the point of time indicated by the x-axis.

We can see from the plot in the top-left corner of Figure A6 that during the first 8 months of the lifetime of cases, majority public support does not make a difference on the probability of policy change enactment. After this point, a difference appears that grows until about month 30, and then starts to shrink somewhat. The dynamic is similar for cases that differ in implied direction of the policy changed (in line with government positions or not).

Looking at the difference between governments with left/GAL and right/TAN positions (top-right panel), the former appear to enact a higher share of cases (consistent with the insights from the previous analyses), and the difference grows over time. The effect of coalition conflict sets in a few months earlier, but starts to disappear after month 16. The effect of having an existing proposal is greatest in terms of size (bottom-left panel), but it is mostly due to changes that accumulate in the first twelve months of the lifetime of cases: if a policy change has not been enacted within this period, it makes little difference whether an existing bill has been in place or not in the beginning of the observation period. The (smaller in absolute size) effect of media salience also sets in early and starts to decline after month 18 or so. Altogether, Figure A6 shows that the effects of all variables considered so far are not very stable over time, and most effects are rather small altogether.