Speaking for the People? : Analysing the extent to which interest groups represent the opinion of the citizens and under which conditions they are more likely to do so

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Chapter 5: The Effects of Information on Lobbying Success

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Technocratic or Democratic Interest Representation? How different Types of Information affect Lobbying Success

Abstract

What type of information helps interest advocates get their way? While it is widely acknowledged in the academic literature that information provision is a key aspect of lobbying, few scholars have directly tested the effect of information on lobbying success. Policymakers need information both on technical aspects and public preferences to anticipate the effectiveness of a policy proposal and electoral consequences. However, scholars have found that interest groups predominantly provide the former rather than the latter, which suggests that technical information is seen as more efficient. The paper argues that lobbying success is not solely a function of the provision of *any* information but of the specific type of information and its composition. It furthermore argues that the relevance of different information types for lobbying success depends on issue characteristics such as public opinion, salience or complexity. Relying on new original data of advocacy activity on 50 specific policy issues in five West European countries, the paper highlights that the provision of expert information increases the likelihood of lobbying success, while the effect of information about public preferences is, if anything, negative. The study ultimately contributes to our understanding of informational lobbying, interest representation and interest group influence.

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5.1 Introduction

Policy outcomes are often the result of multiple actors promoting competing interests (Austen-Smith and Wright 1992; Dahl 1961; Truman 1951). Who wins and who loses in such a game has attracted lots of academic and public attention. Ever since Schattschneider's (1960) claim of bias in the 'heavenly chorus' interest groups are seen as a potential risk that may thwart public policies away from what the public wants (Gray et al. 2004). Pluralist accounts of interest representation, on the other hand, portray interest groups as important intermediaries between the public and the policymaking level (Rasmussen et al. 2014; Truman 1951). Interest groups face a constant organisational tension between catering to their constituents and meeting demands from policymakers, possibly at the expense of what their members and supporters want (Berkhout, Hanegraaff, et al. 2017). The latter situation may reflect a perspective on participatory democracy that is less political and receptive to public pressures, but rather technocratic (De Bruycker 2016) and could explain why interest groups primarily engage in expertise-based information provision rather than transmitting information on what the public wants (Baumgartner et al. 2009; De Bruycker 2016; Nownes and Newmark 2016).

The academic literature considers information as a key aspect of lobbying (cf. Austen-Smith 1993; Hall and Deardorff 2006; Wright 1996), yet has rarely tested the direct effect of information transmission on lobbying success empirically. Moreover, the information transmission capacity of a group has often been seen as an implicit benchmark for its ability to exert influence without examining to what extent such a group actually engages in informational lobbying. Following Wright 'interest groups achieve influence through the acquisition and strategic transmission of information that legislators need to make good public policy and to get reelected' (Wright 1996: 2). This suggests that both policy expertise and information about public opinion are important when lobbying policymakers. Yet, research so far has mostly tested the effect of either information in general (Klüver 2011b; Tallberg et al. 2018) or technical information only (cf. Burstein and Hirsh 2007; Dür et al. 2015), not considering that interest groups provide different types of information (De Bruycker 2016). An important question remains, therefore, to what extent information provision affects lobbying success of interest groups.[35] This paper considers both expert information and information about public preferences. *Expert information* is defined as information about

[35] Influence here is referred to as lobbying success (Mahoney 2008; Rasmussen, Mäder, et al. 2018), which does not assume causality but allows gauging who wins and who loses with regard to shaping public policy.

technical details, the effectiveness of a policy, its legal aspects as well as its economic impact (De Bruycker 2016). *Information on public preferences* refers to information on public preferences, electoral consequences or moral concerns (ibid.: 601) and is not restricted to general public opinion but also includes information of a specific constituency such as stakeholders, members or a somewhat broader constituency.

Drawing on research exchange theory, the paper argues that while both types of information are expected to increase the chance of lobbying success, also the composition of information matters. Hence, emphasising expert information may increase the chance of success as the demand for and the strategic advantage of a group having such information is higher. It will moreover be argued that the relevance of providing either type of information for lobbying success increases as public pressure and the demand for information increases. Using measures of perceived influence and preference attainment, the theoretical argument is tested using a novel dataset collected within the larger GovLis project. Drawing on a media content analysis, interviews, desk research and a survey, the dataset pools information on interest group activity of 380 actors on 50 specific policy issues in five West European countries (Denmark, Sweden, Germany, the Netherlands and the UK). While existing research focused on the US or EU context, this paper provides an account of informational lobbying in a set of Western European countries applying a cross-sectional cross-national research design.

The results suggest that only the provision of expert information increases the chance of lobbying success, while the effect of information about public preferences is, if any, negative after controlling for media attention and expert information. This is intriguing given that policymakers need both types of information and that interest groups are assumed to influence policymaking by meeting these demands (Nownes 2006; Wright 1996). A possible explanation is that weaker groups use information about public preferences as an attempt to compensate for their lack of expertise (Kriesi et al. 2007). Likewise, policymakers' demand for such information may be lower as they have other channels to get informed about public preferences. While this study supports existing research showing that lobbying success is a function of information provision (Austen-Smith 1993; Nownes 2006; Wright 1996), it highlights the importance of distinguishing between different types of information.

5.2 Informational Lobbying

Information is commonly seen as a key aspect for gaining access to policymakers and influence over policy decisions (cf. Nownes and Newmark 2016; Wright 1996). Moreover, some factors are often assumed to explain lobbying success because of the informational value they carry. For example, Bouwen (2004) argues that large and resourceful groups enjoy more access to EU institution because of the amount and type of information they are able to provide. Others assume that business groups are especially influential because of the informational advantage they have compared to other groups (Dür 2008a; Eising and Spohr 2017; Yackee and Yackee 2006). However, relatively little research has tested the direct effect of information on lobbying success. While formal theoretical accounts of informational lobbying illustrated how information can influence decision-making (Austen-Smith 1993; Austen-Smith and Wright 1992; Hall and Deardorff 2006; Lohmann 1998), some notable exceptions examine informational lobbying empirically and give valuable insights this paper aims to expand on.

For example, Dür et al. (2015) test the effect of technical information on lobbying success in the EU context and conclude that technical information decreases the positional distance between the EU commission and the advocate. Similarly, Burstein and Hirsh (2007) test the effect of information on bill enactment and observe an effect for information about the effectiveness provided by supporters on whether a policy proposal was enacted. Klüver (2011b), finds that the information that is supplied by a camp increases lobbying success. Lastly, Tallberg et al. (2018) study lobby influence in International Organisations (IO) and find information to positively affect perceived influence in some IOs. While these studies provide evidence that information is effective, they consider either one type of information only or information in general. Knowledge about the effect of information about public preferences remains scarce as well as conditions under which information is more effective. This paper considers that interest groups possess *different kinds* of information and gauges the effects of such types on lobbying success. It also examines whether the effect of information on lobbying success depends on issue characteristics.

5.3 Resource Exchange and Dependency

The relationship between interest groups and policymakers has often been portrayed as an exchange relationship as both have to rely on each other for some resources (for a review see

Berkhout 2013). One of the resources policymakers have to rely on interest groups for is information (Bouwen 2002).

Following De Bruycker's (2016) two modes of information supply, the paper distinguishes between *expert information*, referring to information on technical details, the effectiveness of a policy, its legal aspects and the economic impact (ibid.: 599) and *information on public preferences*, considering information on public and constituents' preferences, electoral consequences or moral concerns (De Bruycker 2016: 601). So how can such information help an actor to achieve its goals? Policymakers strive to develop good public policy and to get reelected (Wright 1996: 82). To do this, policymakers need information about the effectiveness of a proposal or whether it will be supported by the public and relevant stakeholders (De Bruycker 2016; Wright 1996). Policymakers often lack this information which interest groups can provide. This resource dependency creates an information asymmetry and information becomes a source of influence (Ainsworth 1993; Gilligan and Krehbiel 1989), which bears the risk of groups presenting information to their favour (Tallberg et al. 2018). Consequently, policymakers decide on an outcome that reflects a result, which would have been (slightly) different without the exchange with the interest group, which implies some degree of influence (ibid.).

As mentioned, policymakers need expert information in order to design policies that will be effective and feasible (Wright 1996: 82). Interest advocates possess such information because of their daily work, their members' hands-on-experience or because they or their constituents are directly affected by the policy issue (Michalowitz 2004; Wright 1996). Such information is privately held by the advocates and not necessarily accessible for policymakers who therefore have to rely on the advocates for the information. For example, the national farmers' association has information about the consequences of a ban of glyphosate for their members. They may even have studies and empirical evidence because they interact with their members and know how such a policy would affect them. This is a strategic advantage over others that lack such information on technical details, facts and the economic impact of a new regulation.

Policymakers furthermore need information about what the public wants to reduce uncertainties regarding the support for a new policy (Wright 1996). Scholars have often referred to this as a strategy of information-politics, usually employed by financially weaker actors to compensate the lack of expertise (Beyers 2004; Kriesi et al. 2007). Given that it can be seen as an alternative route to success, it seems important to consider it in the equation.

Democratic governments are expected to decide on policies that reflect public preferences (Dahl 1961) and policymakers rely on people's vote during the next election (Mayhew 1974). For this reason they need information on how people would react to a new policy proposal. Interest groups learn through interactions with members, supporters and clients about their constituents' preferences and therefore possess such information (Michalowitz 2004; Wright 1996). Given the policymakers' need and interest groups' ability to provide either type of information, the provision of expert information and information about public preferences is expected to increase the likelihood of lobbying success.

H1a: The more interest groups engage in the provision of expert information, the higher the likelihood of lobbying success. (Volume Hypothesis I)

H1b: The more interest groups engage in the provision of information on public preferences, the higher the likelihood of lobbying success. (Volume Hypothesis II)

Yet, although interest groups provide both types of information (De Bruycker 2016), the emphasis may vary. Hence, the composition of information that is provided plays a role as well. By virtue of the organisational tension (Berkhout, Hanegraaff, et al. 2017) some advocates may consider the provision of expert information as more relevant, whilst others prefer to predominantly transmit information on public preferences to represent their constituents' interests.

Looking at the information portfolios of interest groups, previous studies found that groups provide more expert information than political information (Baumgartner et al. 2009; Burstein 2014; Nownes and Newmark 2016). Interest groups consider this type of information possibly as more efficient for increasing their likelihood of success. Moreover, the strategic advantage of expert information may be higher which allows for negotiating from a better position. Expert information typically refers to private information that only particular groups can provide, whereas information on public preferences may be more accessible to policymakers so that they do not have to rely on interest groups for the information (Dür 2008a). Moreover, policymakers may learn about constituency preferences through other channels at lower costs. Hence, the strategic advantage to have such information as an interest group is considerably lower. The third hypothesis therefore expects:

H2: The higher the relative emphasis on expert information, the higher the likelihood of lobbying success. (Composition Hypothesis)

However, because of the resource interdependency 'organizations can become subject to pressures from those organizations that control the resources they need' (Bouwen 2002: 368). De Bruycker argues that information on public preferences allows interest groups to exert a considerable amount of pressure which could aid advocacy success under certain circumstances. Thus, under which conditions are policymakers especially vulnerable to such pressures?

Public support and scrutiny are factors that are likely to increase the chance of success of strategies that exert pressure on policymakers (De Bruycker 2016: 600; Kriesi et al. 2007). For example, if public support for an actors' position increases, so should the amount of pressure the actor can exert on policymakers. Public support is a valuable resource for interest groups to have. Public opinion plays an important role for decision-making as policymakers rely on the public's votes for the next election (Mayhew 1974). Interest groups may want different things than the public in which case policymakers have to weigh the costs of going one way or the other. However, the likelihood of lobbying success should be considerably higher when the advocates have a high share of the public on their side (Rasmussen, Mäder, et al. 2018). It allows interest groups to demonstrate public support and compliance and will make it difficult for policymakers to go against public opinion. Hence, the provision of information on public preferences may be more effective when the actor credibly enjoys large public support as it increases the pressure.

Moreover, public salience of an issue may effect whether an actor increases the chances of success when providing information on public preferences. Research has found that political information is used more when public salience is higher (Mahoney 2008). Hence, if an issue is under higher public scrutiny, policymakers cannot easily follow particular interests but have to critically evaluate the positions of all actors. The pressure that actors exert if public scrutiny is higher can be ignored less when the public is able to critically monitor how policymakers act upon a policy decision.

Lastly, scholars have argued that policymakers need information particularly on complex issues (Klüver 2011a) which require predominantly technical and specialised expert information (Mahoney 2008). The need for information on such aspects should therefore increase with the complexity of an issue (Klüver 2011a) and so should the chance of lobbying success for the actor providing such information. Regulatory issues, as an example, are very technical and require more expertise on specific details than redistributive or distributive issues. Hence, actors that have expert information are more likely to be successful where the

demand for such information is greater. In sum, some issue characteristics are expected to determine the effectiveness of both types of information on lobbying success.

H3a: The effect of information about public preferences on lobbying success increases with the share of public support the actor providing the information enjoys.
(Pressure Hypothesis I)

H3b: The effect of information about public preferences on lobbying success increases with the public salience of a policy issue.
(Pressure Hypothesis II)

H3c: The effect of expert information on lobbying success is higher on regulatory issues than on other issues.
(Demand Hypothesis)

5.4 Research Design

The hypotheses will be tested using data collected within the larger GovLis project (Rasmussen, Mäder, et al. 2018). The dataset includes information on public opinion and interest group activity on 50 specific policy issues in five West European countries (Germany, Denmark, Sweden, the UK and the Netherlands). The selection of cases considers variation in the degree to which interest groups are involved in policymaking; the UK being a country in which the interest group system is characterised as pluralist while the Netherlands, Germany, Sweden and Denmark show different degrees of corporatism (Jahn 2016). Although some interest organisations may mobilise to push general policy in a more right or left wing direction, most lobbying activities are targeted at specific policy proposals (cf. Berkhout, Beyers, et al. 2017), which is why the effect of information on lobbying success will be tested on specific policy issues. Each issue constitutes a concrete policy proposal to change the status quo and the issues in the sample were selected as a stratified random sample from issues that occurred in nationally representative public opinion polls. The issues vary moreover with regard to salience, public support and policy type as these aspects are likely to have an impact on lobbying success. Issues in the sample concern for example the question whether to raise the retirement age or to cutting coal subsidies (see Appendix A for a full list of the policy issues).

In addition to information at the level of policy issues, the dataset considers variables at the actor level because the final unit of analysis is an actor on an issue. Actors are defined based on their observable, policy-related activities which follows a behavioural definition of interest groups (Baumgartner et al., 2009). Different steps were taken to identify the actors that mobilised on an issue. First, student assistants coded interest group statements on the specific policy issue in two major newspapers[36] in each country for a period of four years (Gilens 2012) or until the policy changed. Second, interviews with civil servants that have worked on the issue during our observation period (82 % response rate) helped to complement the list of advocates that have mobilised on the issues. Lastly, desk research of formal tools and interactions such as public hearings or consultations was conducted in order to identify more relevant actors. From December 2016 until April 2017 an online survey was distributed amongst 1410 advocates identified as active on the specific issues. 380 answered the questions regarding the variables relevant for the analysis in this paper (see Appendix B1 for response rates), which results in a response rate of 27%.

5.4.1 Dependent Variable

There are different ways of measuring lobbying success. While many studies use the preference attainment approach (Dür 2008b; Mahoney 2008; Rasmussen, Mäder, et al. 2018), this paper measures 'perceived influence' (Binderkrantz and Rasmussen 2015; Tallberg et al. 2018). While similar, these two approaches capture different meanings of influence (Pedersen 2013). The preference attainment approach is a rather 'hard' way of measuring lobbying success, predominantly capturing the first face of power, i.e., directly controlling the policy outcome. This measure does not consider that actors may have achieved smaller successes or side-deals. While this objective way of measuring success ensures a higher external validity (Dür 2008b), it may underestimate the effect of a subtle mechanism like information provision. The perceived influence measure, on the other hand, allows gauging the impact of such an unobtrusive mechanism and to capture both formal and informal ways of influence (Binderkrantz and Rasmussen 2015). Given that one piece of information is not necessarily expected to change a policy, but result in smaller, more subtle changes, the effect of information provision on lobbying success is thus assessed using the perceived influence approach (Tallberg et al. 2018).

[36] Denmark: Politiken and Jyllands-Posten; Germany: Süddeutsche Zeitung and Frankfurter Allgemeine Zeitung; Netherlands: De Volkskrant and NRC Handelsblad; Sweden: Dagens Nyheter and Svenska Dagbladet; United Kingdom: The Guardian and The Telegraph

Perceived Influence was measured by a question in the survey asking about the perceived impact an actor had on a policy issue, 1 meaning no impact at all, while 11 notes extremely high impact. There are some disadvantages regarding the measure of perceived influence. First, groups may have incentives to over- or underestimate their influence to demonstrate their supporters how powerful they are or to downplay their influence to avoid counter-mobilisation (Binderkrantz and Rasmussen 2015; Dür 2008b; Tallberg et al. 2018). Yet Pedersen did not find that any type of group is more likely to be dishonest (2013), which is supported by Tallberg et al. (2018). Moreover, over- or underestimation should be less of a problem in an anonymous survey where neither members nor other groups to which the group may want to signal its relevance have access to the information (Binderkrantz and Rasmussen 2015). Second, groups may have unreliable knowledge as to how influential they are (ibid.). Yet, given that the paper looks primarily at the difference between the two types of information, there is no reason to suspect that the lack of knowledge plays out more for one dimension than for the other (cf. ibid. for a similar argument). While both measures have advantages and disadvantage, the paper takes the perceived influence approach, allowing gauging also smaller lobbying success that may result from information provision. Nevertheless, the paper provides an analysis using the preference attainment approach as an alternative measure in the robustness section.

5.4.2 Independent Variables

Hypothesis 1 tests the effect of providing different types of information on lobbying success. Information provision was measured by asking survey respondents how often certain arguments have been used (Appendix B2 provides an overview of the survey questions). *Expert information* consists of arguments referring to (a) facts and scientific evidence, (b) feasibility and effectiveness of the proposed policy, (c) economic impact for the country and (d) compatibility with existing legislation (De Bruycker 2016: 601). The answer categories range from 1-5 and the values for the different arguments were added and divided by four.

Information on Public Preferences is based on arguments referring to public support on the issues (ibid.) as well as fairness and moral principles (Nownes and Newmark 2016). The second proxy ensures that not only information about general public opinion is included, but also how a policy will affect organisations and/or certain segments of society (Burstein 2014; Nownes and Newmark 2016). Again, the items were added and divided by two so that the final variable ranges from 1-5. Hypothesis 2 tests the effect of an actor placing a higher

emphasis on expert information.[37] *Relative Expert Information* is calculated by subtracting the amount of information on public preferences from expert information, which is then divided by their sum.[38] Values larger than zero indicate that the actor emphasised expert information, while values smaller than zero indicate a higher emphasis on information on public preferences.

Hypothesis 3a tests the moderating effect of public support for information about public preferences. The variable *Public Support for an Actor* measures the share of the public an actor had on its side on an issue and is based on public opinion data and the actor's position.[39] Hypothesis 3b explores whether the effect of information about public preferences increases when public salience increases. *Saliency* measures the log of the average number of articles containing a statement that have been published on an issue per day in the two coded newspapers during the observation period. Hypothesis 3c assesses the effect of expert information on regulatory issues. The variable *Policy Type* distinguishes between redistributive, distributive and regulatory issues (Lowi 1964), whereby the final binary variable reports a 1 for regulatory and a 0 for redistributive and distributive issues.

5.4.3 Control Variables

Influencing policy outcomes is a complex endeavour and success depends on multiple factors. The analysis therefore controls for a number of aspects. First, the analysis considers the alternative explanation that lobbying success is a function of other resources than information and hence includes *Economic Resources* as well as *Perceived Media Attention* (Tallberg et al. 2018). One survey question asks about the extent to which an actor agreed to have spent a large amount of economic resources on lobbying activities for the policy issue. A second question probes the extent to which the actor agreed to have a high level of media attention for their activities to scrutinise the effect of outside lobbying strategies. Respondents could answer on a five-point agreement scale with 5 indicating strong agreement.

[37] One could argue that it may be difficult for survey respondents to clearly distinguish between the two types of information as technical arguments can also include a normative judgment. De Bruycker (2016) compares how often interview respondents indicated to have used different information types to how often such information types have been identified using hand-coding and comes to the same conclusion, which suggests that respondents can identify different information types.

[38] This resembles a measure used by Dür and Mateo (2013) to calculate the relative inside strategy compared to outside strategies by interest groups.

[39] As an indicator of the extent to which the actor could rely on public expressions of support, one could potentially also use a variable asking how important respondents considered organising protests or other activities mobilising the public. All analyses have been run using such an alternative measure instead, which, however, does not alter the results (see Appendix H).

The analysis furthermore considers different types of advocates, because business actors are often assumed to more likely attain their preferences (Bunea 2013; Yackee and Yackee 2006). The variable *Interest Group Type* (see Appendix C for an overview of the different actor types)[40] distinguishes between (1) citizen groups, including public interest groups and hobby & identity groups, (2) professional groups, covering trade unions and occupational groups, (3) business groups, including firms and business associations and (4) experts and others, encompassing individual experts, think tanks and institutional association.

The variable *Camp Support* considers that lobbying is a collective enterprise (Klüver 2011b) and controls whether a more one-sided mobilisation is likely to increase lobbying success (Mahoney 2008). It is operationalised as the share of advocates on the same side of an actor. The variable *Pro Change* indicates a 1 for actors favouring policy change and a 0 for those that want to keep the status quo which is included as actors aiming to challenge the status quo need to invest more to convince policymakers to risk unforeseeable consequences and are hence less likely to achieve their goal (Baumgartner et al. 2009). Lastly, *Organisational Salience* controls how important an actor considered an issue as this may affect the lobbying strategy and intensity and hence success. This variable is measured on a five point scale, asking how important an actor considered an issue compared to other issues. Appendix D presents an overview of all variables including a correlation matrix.

5.5 Analysis

The level of observation are advocates who are nested in policy issues. Given that the models include variables both at the actor and the issue level, all models are run as multilevel models with random intercepts for policy issues to account for the heterogeneity of different policy issues and country fixed effects. The models presented in the analysis are OLS regression models.[41] All models have been built stepwise (Appendix F), whereas Table 5.1 presents only the full models including all controls.

[40] An intercoder-reliabilty test on the same sample resulted in a Krippendorff's alpha of 0.92 in distinguishing these different actor types (effective n=50, 2 raters).
[41] See Appendix E for alternative model specification.

Table 5.1: Multilevel OLS Regression for Perceived Influence (SEs in Parentheses)[42]

	(1)	(2)	(3)	(4)	(5)
H1a: Expert Info	1.03***		1.03***	1.03***	1.04***
	(0.17)		(0.17)	(0.17)	(0.21)
H1b: Info Public Preferences	-0.43**		-0.45	-0.65*	-0.43**
	(0.13)		(0.29)	(0.27)	(0.13)
H2: Relative Expert Info		3.08***			
		(0.70)			
H3a: Public Support for Actor*			0.02		
Public Info			(0.48)		
H3b: Salience*Public Info				-0.06	
				(0.07)	
H3c: Regulatory*					-0.02
Expert Info					(0.26)
Actor Level Controls					
Group Type (Ref: Citizen Groups)					
Professional Groups	0.53	0.58	0.53	0.52	0.54
	(0.38)	(0.39)	(0.38)	(0.38)	(0.38)
Business & Firms	-0.84*	-0.91*	-0.84*	-0.85*	-0.84*
	(0.39)	(0.40)	(0.39)	(0.39)	(0.39)
Experts & Co	-0.68*	-0.67+	-0.68*	-0.68*	-0.67*
	(0.34)	(0.35)	(0.34)	(0.34)	(0.34)
Economic Resources	0.14	0.22+	0.14	0.15	0.14
	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
Perceived Media Attention	0.91***	1.11***	0.91***	0.91***	0.91***
	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Pro Change	-0.03	-0.06	-0.03	-0.04	-0.03
	(0.27)	(0.28)	(0.27)	(0.27)	(0.27)
Camp Support	1.11+	0.95	1.11+	1.13+	1.11+
	(0.61)	(0.63)	(0.61)	(0.61)	(0.61)
Public Support for Actor	1.11+	1.15+	1.04	1.04	1.12+
	(0.65)	(0.66)	(1.54)	(0.65)	(0.65)
Org. Salience	0.06	0.20+	0.05	0.06	0.06
	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
Issue Level Controls					
Salience	0.01	0.01	0.01	0.22	0.01
	(0.10)	(0.10)	(0.10)	(0.25)	(0.10)
Regulatory Issue	0.58*	0.53*	0.58*	0.57*	0.66
	(0.25)	(0.26)	(0.26)	(0.25)	(0.94)
Country (Ref: Germany)					
UK	-0.56	-0.35	-0.56	-0.62	-0.56
	(0.49)	(0.50)	(0.49)	(0.49)	(0.49)
Denmark	-0.36	-0.48	-0.36	-0.38	-0.36
	(0.45)	(0.46)	(0.45)	(0.45)	(0.45)
Sweden	0.53	0.45	0.53	0.51	0.53
	(0.47)	(0.48)	(0.47)	(0.47)	(0.47)
Netherlands	1.26**	1.26**	1.26**	1.21**	1.26**
	(0.44)	(0.45)	(0.44)	(0.45)	(0.44)
Constant	-2.01*	-1.27	-1.97+	-1.23	-2.05*
	(0.89)	(0.89)	(1.16)	(1.22)	(1.01)
Policy Issue Intercept	Yes	Yes	Yes	Yes	Yes
N Actors	380	380	380	380	380
N Issues	46	46	46	46	46
AIC	1751	1768	1753	1752	1753

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

[42] Vif scores range from 1.15-3.07, suggesting that multicollinearity is not a problem.

Model 1 tests hypotheses 1a and 1b which argued that higher amounts of either type of information increase the likelihood of lobbying success. In line with hypothesis 1a, there is a positive and significant effect for expert information ($p<0.001$). Hence, in line with previous work in the US or EU context that argues that information is a valuable exchange good (Bouwen 2002), the results confirm that expert information increases the likelihood of lobbying success (Burstein and Hirsh 2007; Dür et al. 2015). However, Model 1 also shows that hypothesis 1b cannot be confirmed. In fact, the effect of information on public preferences is negative ($p<0.01$). Figure 5.1 presents the predicted margins and compares the effect of expert information and information on public preferences on lobbying success. While the red, dashed line shows a positive increase on perceived influence from low levels of expert information to high levels of expert information, the black, solid graph shows a reversed pattern for information on public preferences.

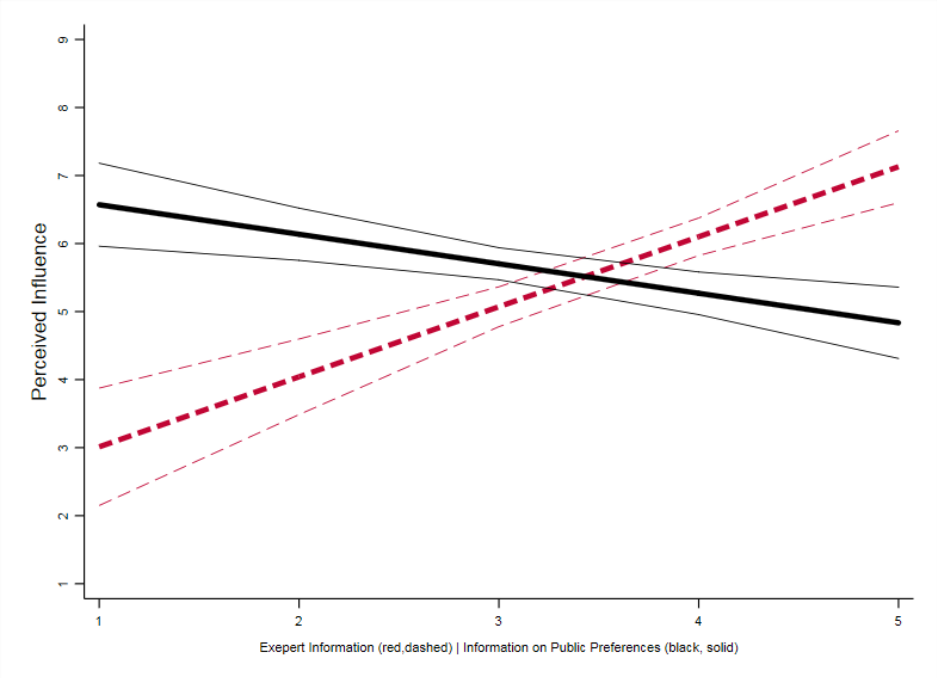

Figure 5.1: The effect of Expert Information (red, dashed) and Information about Public Preferences (black, solid) on Perceived Influence.

However, stepwise model-building shows that the coefficient for information on public preferences only becomes negative in the full model when controlling for media attention or expert information (see Appendix F). Outside lobbying has often been seen as a 'weapon of the weak' (Berkhout 2013) and the negative effect of information on public preferences may rather be a result of weaker actors than the information itself. However, this also means that

while some argue that information-politics is used by actors with less resources (Beyers 2004; Kriesi et al. 2007), providing such information cannot be seen as an alternative route to lobbying success. Furthermore, the coefficient of information on public preferences also becomes negative when controlling for expert information. Interest groups often provide both types of information and the possession of one type is likely to affect the provision of another type.[43] Yet when controlling for expert information it becomes clear, that eventually it is expert information that matters. Hence, one should thus consider both types of information, irrespective of whether one aims at explaining information provision (De Bruycker 2016; Mahoney 2008) or lobbying success as a function of information provision (Chalmers 2011; Klüver 2011b; Tallberg et al. 2018). Another potential reason for the negative effect for information about public preferences might lie in the issue itself as some issues cannot be easily addressed with technical expertise. For example, some issues are quite controversial as they imply a moral or ideological stance. Public exposure resulting from the controversy of the issue may make it difficult for policymakers to change sides. Interest groups trying to lobby policymakers by providing information about public preferences may find it hard to get their preferred outcome. Appendix G looks more into this, including a model controlling for the controversy of an issue, which, however, does not alter the results.

Model 2 tests hypothesis 2, which argued that the composition of information has an effect on lobbying success. The effect for this relative measure is positive and significant ($p<0.001$), which suggests that actors who emphasise expert information perceive their lobbying efforts as more successful. This contributes to research arguing that information provision increases lobbying success (Bouwen 2002; Chalmers 2011; Klüver 2011b; Nownes 2006; Tallberg et al. 2018; Wright 1996) by showing that it is not about any type of information but primarily about expert information. However, the effect only becomes significant when controlling for actor level variables, the interpretation should therefore be cautious.

Models 3-5 test hypotheses 3a-c, scrutinising whether the effect of either type of information is stronger under certain circumstances. Yet none of the interaction effects shows significant results. So while some research argues that information provision and lobbying success is context-dependent (De Bruycker 2016; Mahoney 2008), the results here do not indicate that the two modes of information supply are more effective under certain

[43] The correlation between these two variables is 0.52, but not problematic (Vif<2).

circumstances. This also means that, in order to be successful, advocates have to provide a certain amount of expert information, irrespective of how much public pressure or demand there is.

With regard to the control variables, Models 1, 2 and 5 show positive effects for public support for an actor on lobby success ($p<0.10$), which confirms recent results (Rasmussen, Mäder, et al. 2018). Moreover, four of the five models show a positive effect of having a camp's support for lobbying success ($p<0.10$) (Mahoney 2008). There is little to no effect of economic resources, which is also in line with previous studies (Baumgartner et al. 2009; Mahoney 2008). Business groups as well as experts perceive their lobbying activities as less successful than citizen groups ($p<0.10$ or lower). Perceived media attention has a strong positive effect on lobbying success in all models ($p<0.001$), which indicates that those that have gained more media attention consider their activities as more successful. However, a potential reason for this effect could be the perceived influence measure itself. For example, actors might see placing an item on the public agenda as successful lobbying. Yet, the theoretical argument is about how information provision affects advocacy success when lobbying policymakers and the survey question asks about success on political decisions. The variable perceived media attention, therefore, is included to control for any kind of media success. Nevertheless, Appendix I discusses this more in detail and provides further analysis. For example, Table I presents models excluding media attention, showing that the effect for expert information stays the same while the significance for information about public preferences drops to $p=0.052$.

Furthermore, the effect for organisational salience is significant in one of the five models, which does not indicate strong evidence that the importance actors devote to an issue affects their perceived lobbying success. Four models show furthermore positive and significant effects for regulatory issues ($p<0.05$), which means that on such issues the chance of lobbying success increases. Even though the interaction term was not significant, it could suggest that the demand for interest groups is highest on such issues which increases the chance of success. Lastly, interest groups in the Netherlands perceive themselves as more successful than in Germany ($p<0.01$). A potential reason could be that the Netherlands has become more corporatist over the years (Jahn 2016: 60) which could explain why Dutch advocates feel more included in policymaking. However, this certainly needs further research with a larger sample of countries.

5.6 Robustness and Limitations

As discussed in the research design section, the perceived influence measure has some disadvantages as it is a measure based on perception. As a robustness check, the analyses therefore have been conducted with the alternative preference attainment approach (Dür 2008b). Preference attainment measures whether a policy outcome is congruent with an actor's position on an issue (see Appendix J for how preference attainment was measured). Using this alternative measure of lobbying success reveals similar results (see Appendix J): The effect of expert information is positive ($p<0.1$), while the effect of information about public preferences is negative ($p<0.05$). Moreover, the composition of information has a positive and significant effect ($p<0.05$). Figure 5.2 shows the predicted probabilities for success across the observed range of the combined measure. The predicted probabilities range from 40% for actors predominantly providing information on public preferences to 73% for actors predominantly focusing on expert information.

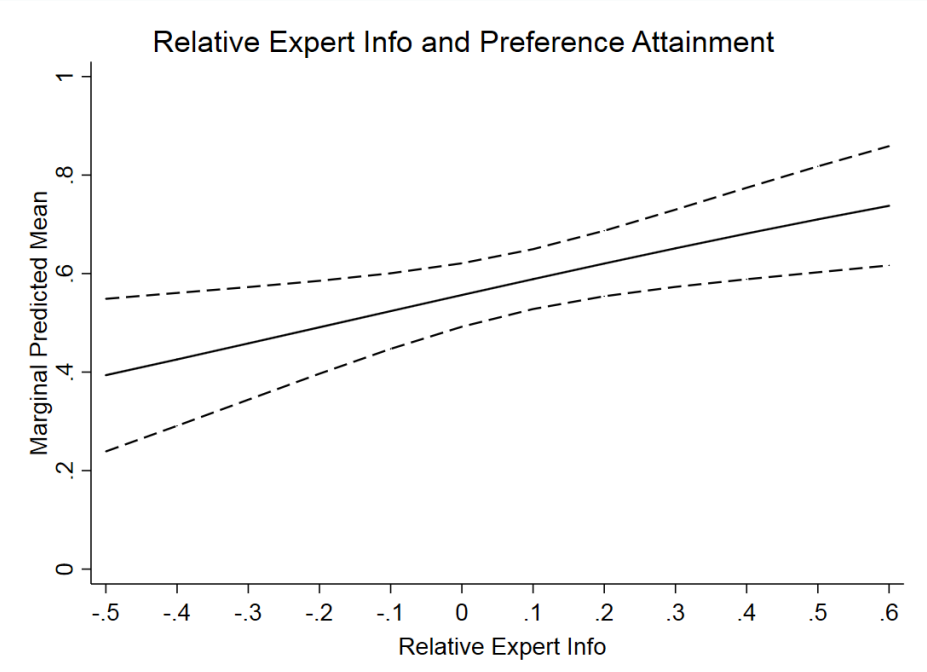

Figure 5.2: Predicted Probabilities for Preference Attainment for different levels of Relative Expert Information.

These results, however, should be interpreted with caution. All models have been built stepwise, yet the main effects only become significant in the full model. This underlines the caveat mentioned earlier that the test of an effect of information types on preference

attainment is a hard test for a subtle mechanism. However, it also highlights that lobbying success is determined by many factors and not one single factor alone. The effects become significant after controlling for economic resources and camp support. This could indicate that the effect of information on lobbying success depends on how good the information is and that the actual effect of information is only significant after taking out variation of factors determining the quality of the information. It is unclear what makes information 'good' information, yet we know that in order to be efficient information has to be costly (Wright 1996). Moreover, information provided by an actor who enjoys broad support can signal information in a much more credible manner and policymakers are especially receptive for credible information (Beyers 2004; De Bruycker 2016).

Some other limitations of the study concern the venue and target of information provision as the study did not consider that interest groups use different channels to provide their information. The amount and the effect of information on public preferences may be different when considering the outside arena only. However, the study intended to look at information transmission to policymakers to gauge effects on decision-making on policies. Yet again, information provision may differ depending on whether the target of information is a bureaucrat or a parliamentarian, which the analysis cannot distinguish. Studies that can do so may find more fine-grained effects for different targets of information. Another caveat may refer to non-response bias of the survey respondents. While the overall response rate is within the margin of what is considered to be typical for interest group surveys (Marchetti 2015), there are some differences across countries. Yet, the paper does not aim at theorising about country differences but rather at generalising towards North West European policy advocates, which should be kept in mind when interpreting the findings.

Summarising, the results do not provide crystal clear evidence and indicate some of the challenges of analysing the subtle effects of information transmission on policymaking. Yet, given that a lot of research works with the assumption that information matters, the empirical assessment in a cross-sectional cross-national context yields new insights and allows the tentative conclusion: The provision of expert information enhances the chance of lobbying success, while the effect of information on public preferences is, if any, negative.

5.7 Conclusion

The paper started from the argument that lobbying success is a function of the information that interest groups provide. While information has long been seen as a key aspect of lobbying success (Austen-Smith 1993; Hall and Deardorff 2006; Wright 1996), little research has directly tested the effect of information provision on lobbying success empirically. This paper offers an empirical assessment of *different types of information* on lobbying success in a set of five West European countries on a variety of specific policy issues. Few studies in the US or at the EU level have either looked at information in general or at the provision of technical information only (Burstein and Hirsh 2007; Dür et al. 2015; Klüver 2011b; Tallberg et al. 2018). Given that theories of informational lobbying argue that policymakers need both expert information and information on public preferences (Nownes 2006; Wright 1996), the paper argued that in order to understand the effectiveness of informational lobbying and interest representation more generally, political information needs to be added to the equation.

The results show that actors increase their likelihood of lobbying success when they provide expert information. This confirms existing studies (Burstein and Hirsh 2007; Dür et al. 2015) but expands these insights to a cross-national context. However, contrary to the expectation that both types of information should matter, the findings highlight that lobbying success is only the result of the provision of one of them. In contrast, actors engaging in more pressure-based information provision do not increase their chance of achieving their goals across issues in the sample. So while information politics has often been seen as a weapon of the weak (Beyers 2004; Kriesi et al. 2007), the analysis illustrates that such information cannot compensate. Moreover, the effect of either type of information does not increase as demand for such information or public pressure increases.

The findings have implications for democratic interest representation. The fact that groups need expert information (instead of information on public preferences) could disadvantage those that are less well equipped to provide such information. Moreover, it could mean that policy decisions are rather made in the light of technical considerations than of what different constituents want (De Bruycker 2016). It speaks to the organisational dilemma interest groups face (cf. Berkhout, Hanegraaff, et al. 2017), i.e., the tension whether to cater to constituents or meet the demands of policymakers, which results in a more technocratic (and maybe less democratic?) form of interest representation. For interest groups it seems to be more valuable to provide expert information, potentially because its strategic value is

considerably higher. Expert information is difficult to access for policymakers and other actors not working in the respective policy field. Therefore, having such information seems to be the comparative advantage for interest groups. Moreover, the demand for information on public preferences may be lower as policymakers have other sources to acquire such knowledge, which makes the strategic value of this type of information lower. Nevertheless, interest groups employ various strategies when lobbying policymakers and may consider expertise-information supply as most efficient to also represent their constituents' interest. For example, advocates may simply frame their constituents' demands in a much more technical way to convince policymakers of their preferred direction. As this paper shows: they are well advised to provide expert information for to be successful.

5.8 Appendices

Appendix A: Overview of Policy Issues

Country	Policy issue
Denmark	Building of a bridge for vehicles and trains across the Kattegat
	Reducing mortgage interest deduction from 33% to 25%
	Granting asylum to families with children among rejected Iraqi asylum seekers
	Reducing the unemployment benefit period by half from four to two years
	Strengthening the control of the Danish agriculture in order to take action against the misuse of antibiotics
	Controlled delivery of heroin for particularly vulnerable drug addicts at special clinics as a pilot scheme
	Introducing differentiated VAT
	Making schools' average test results public
	Cutting the allowances paid to young people between 25 and 29 years by half
	Creation of an equal pay commission
Germany	Financial support of Arcandor through public money
	Guaranteeing a pension above the poverty line for pensioners who have paid contributions for many years
	Supplying citizens with consumption vouchers to boost the economy
	Establishing a wealth tax
	State control of electricity prices
	Banning of computer games that glorify violence
	Cutting the tax exemption for night, Sunday, and holiday supplements
	Cutting coal subsidies
	Making it illegal to carry out a paternity test without the consent of the mother
	Cutting social benefits
Netherlands	Allowing all illegal immigrants who have lived in the Netherlands for a long time to stay
	Raising the retirement age to 67
	Abolishing the mortgage interest
	Spending more money on development aid
	Obligating stores to be closed on Sunday
	Ban of smoking in restaurants
	Banning embryonic stem cell research
	Allowing more asylum seekers
	Banning euthanasia
	Building new nuclear power plants
Sweden	Permanent introduction of a congestion charge in Stockholm
	Reinstating the wealth tax, which was abolished in 2007 and meant that anyone with a fortune of 1.5 million paid 1.5% in taxes
	Rescuing Saab through government funds
	Banning the construction of minarets in Sweden
	Reducing third-world aid
	Introducing a language test for Swedish citizenship
	Restricting the right to free abortion
	Making household and domestic services tax deductible
	Allowing free download of all films and music from the Internet
	Increasing the old age retirement age
	Giving amnesty to illegal immigrants who have spent ten years in Britain without getting into trouble with the police
	Scrapping ID cards
	Requiring food manufacturers to reduce the fat/salt content in their products
	Introducing a graduate tax, where graduates would pay an extra income tax on their

UK	income after graduating
	Allowing a third runway to be built at Heathrow Airport
	Reducing corporation tax
	Increasing Air Passenger Duty, to be paid by people taking both short-haul and long-haul flights
	Subsidising the building of new nuclear power stations
	Increasing the tax on large executive-style, estate, and 4x4 vehicles
	Downgrading ‘ecstasy’ from a class-A drug to a class-B drug

Appendix B: Overview of Survey Data

B1. Response Rates Per Country for the GovLis Survey

Country	Not Completed	Completed	Total Invited
Germany	175	50	225
	77%	22%	100%
UK	339	73	412
	82%	18%	100%
Denmark	114	134	248
	45%	54%	100%
Sweden	173	96	269
	64%	36%	100%
Netherlands	131	125	256
	51%	49%	100%
Total	932	478	1,410
Total rate (%)	66%	34%	100%

B2. Survey Questions

The appendix B2 lists a template of the survey questions. The actual survey was individualised for each specific policy issue (*policytitle*) and time of observation (*period*). Furthermore, all questions were adjusted according to the advocate's specific actor type (*membership organisation/firm/expert*).

Perceived Influence

How would you rate your impact*(experts)*/the impact of your organisation*(associations)*/the impact of your company*(firms)* on political decisions on the issue of (policytitleshort) on a scale from 0 (no impact at all) to 10 (extremely high impact) (periodlong)?

Note that respondents could use a slider to indicate their response.

Arguments

Regarding the issue of #u_policytitleshort# #u_periodlong#, how often did you/your organisation/your company use arguments…

… referring to facts and scientific evidence	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Very Often (5)	DK
… referring to the feasibility and effectiveness of the proposed policy	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Very Often (5)	DK
… referring to the economic impact for the country	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Very Often (5)	DK

… referring to compatibility with existing legislation	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Very Often (5)	DK
… referring to public support on the issue	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Very Often (5)	DK
… referring to fairness and moral principles	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Very Often (5)	DK

Economic Resources

Regarding the issue of #u_policytitleshort#, please indicate whether you agree that you/ your company/ your organization…

… spent a high level of economic resources.	Strongly Disagree (1)	Disagree (2)	Neither agree or disagree (3)	Agree (4)	Strongly Agree (5)	DK

Perceived Media Attention

Regarding the issue of #u_policytitleshort#, please indicate whether you agree that you/ your company/ your organization…

… had media attention.	Strongly Disagree (1)	Disagree (2)	Neither agree or disagree (3)	Agree (4)	Strongly Agree (5)	DK

Organisational Salience

This survey addresses the issue of #u_policytitleshort#. #u_explainissue# How important was the issue of #u_policytitleshort# to you compared to other policy- related issues you work on?

5 = Much more important
4 = More important
3 = Equally important
2 = Less important
1 = Much less important

Appendix C : Interest Group Categorization

The coding scheme relies on the INTERARENA project (Binderkrantz et al. 2015) to which firms and think tanks have been added.

Public interest groups
Environment and animal welfare
Humanitarian – international
Humanitarian – national
Consumer Group
Government reform
Civil liberties
Citizen Empowerment
Other public interest

Business associations
Peak-level business group
Sector-wide business group
Breed associations
Technical business associations
Other business group

Firms

Labour groups and occupational associations
Blue-collar union
White-collar union
Employee representative committee
Other labour groups
Doctors' associations
Other medical professions
Teachers' associations
Other occupational associations

Identity, hobby and religious groups

Patients
Elderly
Students
Friendship groups (i.e. non-specific groups related to a country)
Racial or ethnic
Women
Lesbian/Gay/Bisexual/Transsexual
Other – undefined - identity group
Sports groups
Other hobby/leisure groups
Groups associated with the protestant church
Roman/Catholic groups
Other religious group

Expert organizations, think tanks and institutional association
Expert organizations
Think tanks

Associations of local authorities
Associations of other public institutions
Associations of managers of public institutions
Other Institutional associations

Appendix D: Overview of Variables

D1. Descriptive Statistics of all Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
Perceived Influence	380	5.623684	2.888969	1	11
Preference Attainment	380			0	1
Info on Public Pref.	380	3.182895	1.232304	1	5
Expert Info	380	3.538158	.9484701	1	5
Economic Res.	380	2.394737	1.183427	1	5
Perceived Media Attention	380	3.85	1.040664	1	5
Group Type (Categorical)	380			1	4
Pro Change (Binary)	380			0	1
Camp Support	380	.5206762	.2175081	0	1
Public Support for Actor	380	.5151905	.213892	.0795441	.9204559
Org. Salience	380	3.397368	1.152029	1	5
Media Salience (log)	380	-3.512.584	1.400314	-6.614726	-.7323679
Regulatory Issue (Binary)	380			0	1
Country (Categorical)	380			1	5

D2. Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11	12
Info on Public Pref.(1)	1											
Expert Information (2)	0.52	1										
Economic Res. (3)	0.26	0.29	1									
Media Attention (4)	0.42	0.44	0.27	1								
Group Type (5)	-0.23	-0.01	-0.09	-0.05	1							
Pro Change (6)	-0.07	-0.02	-0.06	-0.00	0.06	1						
Camp Support (7)	0.08	-0.06	0.08	0.02	-0.06	0.18	1					
Public Support for Actor (8)	0.19	0.01	0.09	0.02	-0.11	-0.31	0.29	1				
Org. Salience (9)	0.41	0.42	0.30	0.35	-0.11	-0.01	0.04	0.08	1			
Media Salience (10)	0.06	0.11	0.26	0.03	-0.11	0.16	-0.08	-0.05	0.15	1		
Regulatory Issue (11)	0.15	-0.03	0.03	0.12	-0.13	0.02	0.12	0.08	0.09	-0.10	1	
Country (12)	0.16	-0.04	-0.04	0.04	-0.01	0.05	-0.01	-0.01	0.16	-0.04	0.06	1

N=380

Appendices E-J: Different Model Specification

The models in the paper are run as OLS regressions. However, the analysis has also been run using ordered logistic regression models which give the same results (see Appendix E).

Appendix E: Multilevel ordered logistic regression models (SEs in Parentheses)

	(E1)	(E2)	(E3)	(E4)	(E5)
H1a: Expert Info	0.82***		0.82***	0.82***	0.82***
	(0.14)		(0.14)	(0.14)	(0.17)
H1b: Info Public Preferences	-0.32**		-0.36	-0.46*	-0.32**
	(0.10)		(0.22)	(0.21)	(0.10)
H2: Relative Expert Info		2.34***			
		(0.54)			
H3a: Public Support for Actor * Public Info			0.07		
			(0.37)		
H3b: Salience* Public Info				-0.04	
				(0.05)	
H3c: Regulatory* Expert Info					0.01
					(0.20)
Actor Level Controls					
Group Type (Ref: Citizen Groups)					
Professional Groups	0.41	0.42	0.41	0.40	0.41
	(0.29)	(0.29)	(0.29)	(0.29)	(0.29)
Business & Firms	-0.66*	-0.71*	-0.66*	-0.66*	-0.66*
	(0.31)	(0.31)	(0.31)	(0.31)	(0.31)
Experts & Co	-0.50+	-0.50+	-0.51+	-0.50+	-0.50+
	(0.26)	(0.27)	(0.26)	(0.26)	(0.26)
Economic Resources	0.10	0.18*	0.10	0.10	0.10
	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)
Perceived Media Attention	0.71***	0.84***	0.71***	0.71***	0.71***
	(0.11)	(0.10)	(0.11)	(0.11)	(0.11)
Pro Change	-0.01	-0.02	-0.01	-0.02	-0.01
	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)
Camp Support	0.88+	0.77	0.88+	0.89+	0.88+
	(0.49)	(0.49)	(0.49)	(0.49)	(0.49)
Public Support for Actor	0.92+	0.98*	0.70	0.87+	0.92+
	(0.50)	(0.50)	(1.21)	(0.50)	(0.50)
Org. Salience	0.04	0.16+	0.04	0.05	0.04
	(0.10)	(0.09)	(0.10)	(0.10)	(0.10)
Issue Level Controls					
Media Salience	0.01	0.01	0.01	0.15	0.01
	(0.07)	(0.07)	(0.07)	(0.19)	(0.07)
Regulatory Issue	0.46*	0.43*	0.46*	0.46*	0.44
	(0.20)	(0.20)	(0.20)	(0.20)	(0.74)
Country (Ref: Germany)					
UK	-0.31	-0.19	-0.32	-0.35	-0.31
	(0.40)	(0.39)	(0.40)	(0.40)	(0.40)
Denmark	-0.20	-0.34	-0.20	-0.21	-0.20
	(0.37)	(0.36)	(0.37)	(0.37)	(0.37)
Sweden	0.53	0.40	0.53	0.52	0.53
	(0.38)	(0.38)	(0.38)	(0.38)	(0.38)
Netherlands	1.02**	0.96**	1.01**	0.98**	1.02**
	(0.36)	(0.36)	(0.36)	(0.37)	(0.36)
Policy Issue Intercept	Yes	Yes	Yes	Yes	Yes
Number of Cases	380	380	380	380	380
AIC	1621	1639	1623	1623	1623

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Appendix F: Stepwise Model building OLS Regression (SEs in Parentheses)

	(F1)	(F2)	(F3)	(F4)
H1a: Expert Info	1.29***			
	(0.14)			
H1b: Info Public Preferences		0.59***		0.21
		(0.12)		(0.13)
H2: Relative Expert Info			0.86	
			(0.77)	
Actor Level Controls				
Group Type (Ref: Citizen Groups)				
Professional Groups				0.82+
				(0.43)
Business & Firms				-0.48
				(0.44)
Experts & Co				-0.22
				(0.38)
Economic Resources				0.35**
				(0.13)
Pro Change				0.05
				(0.31)
Camp Support				0.65
				(0.69)
Public Support for Actor				0.49
				(0.73)
Org. Salience				0.42**
				(0.13)
Issue Level Controls				
Media Salience				-0.05
				(0.11)
Regulatory Issue				0.50+
				(0.29)
Country (Ref: Germany)				
UK	-0.70	-0.46	-0.23	-0.45
	(0.58)	(0.57)	(0.65)	(0.55)
Denmark	0.28	0.20	0.25	-0.45
	(0.51)	(0.50)	(0.57)	(0.51)
Sweden	0.70	0.51	0.53	0.28
	(0.55)	(0.55)	(0.62)	(0.53)
Netherlands	1.24*	0.82	1.46*	0.79
	(0.52)	(0.52)	(0.59)	(0.50)
Constant	0.66	3.44***	5.06***	1.60+
	(0.65)	(0.55)	(0.48)	(0.93)
Policy Issue Intercept	Yes	Yes	Yes	Yes
Number of Cases	380	380	380	380
AIC	1809	1862	1884	1843

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Note: Model 1-3 show the single effects of each information variable, while Model 4 shows the full model excluding expert information and perceived media attention.

Appendix G: Public Controversy

Table G looks at the nature of the issue itself. For example, one could argue that some issues are simply easier to frame in more technical terms, while other issues cannot be expressed in technical terms as they have an ideological or moral dimension to them. Such issues also typically provoke quite some controversy and public attention. Moreover, such issues are relatively difficult to respond to by policymakers as they have to favour one side over the other or take an ideological stance. Therefore, lobbying by information about public preferences might be less effective. Table G1 controls for conflict through an interaction between two variables. The first measures the distance of public support to an evenly split public (50-50). This measure of how divided the public is, is interacted with the media salience of an issue: if the public is divided and the issue attracts a lot of attention this should make it very likely that the issue is controversial. The interaction effect is insignificant but controlling for it does not change the negative and significant effect of information on public preferences.

Table G: Multilevel OLS Regression for Perceived Influence (SEs in Parentheses) controlling for controversy*saliency

	(G1)	(G2)
H1a: Expert Info	1.01***	
	(0.17)	
H1b: Info Public Preferences	-0.42**	
	(0.13)	
H2: Relative Expert Info		2.97***
		(0.70)
Actor Level Controls		
Group Type (Ref: Citizen Groups)		
Professional Groups	0.55	0.58
	(0.38)	(0.39)
Business & Firms	-0.87*	-0.97*
	(0.39)	(0.40)
Experts & Co	-0.69*	-0.72*
	(0.34)	(0.35)
Economic Resources	0.14	0.22+
	(0.12)	(0.12)
Pro Change	-0.05	-0.09
	(0.27)	(0.28)
Camp Support	1.10+	0.98
	(0.61)	(0.63)
Perceived Media Attention	0.92***	1.12***
	(0.14)	(0.13)
Public Support for Actor	1.14+	1.14+
	(0.65)	(0.66)
Org. Salience	0.06	0.21+
	(0.12)	(0.12)
Issue Level Controls		
Salience	-0.09	-0.12
	(0.14)	(0.14)
Controversy	2.80	4.47
	(3.05)	(3.10)
Salience*Controversy	0.74	1.03
	(0.72)	(0.73)
Regulatory Issue	0.55*	0.45+
	(0.27)	(0.27)
Country (Ref: Germany)		
UK	-0.59	-0.38
	(0.49)	(0.50)
Denmark	-0.35	-0.44
	(0.45)	(0.46)
Sweden	0.57	0.55
	(0.47)	(0.48)
Netherlands	1.25**	1.28**
	(0.44)	(0.45)
Constant	-2.36*	-1.86+
	(0.96)	(0.97)
Policy Issue Intercept	Yes	Yes
Number of Cases	380	380
AIC	1754	1770

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Appendix H: Multilevel OLS Regression for Perceived Influence (SEs in Parentheses), using Organising Protest as an alternative measure for Public Support for an actor

	(H1)	(H2)	(H3)	(H4)	(H5)
H1a: Expert Info	1.07***		1.07***	1.06***	1.06***
	(0.17)		(0.17)	(0.17)	(0.21)
H1b: Info Public Preferences	-0.53***		-0.54*	-0.80**	-0.53***
	(0.14)		(0.21)	(0.27)	(0.14)
H2: Relative Expert Info		3.64***			
		(0.74)			
H3a: Organising Protest*			0.00		
Public Info			(0.08)		
H3b: Salience*Public Info				-0.08	
				(0.07)	
					0.02
H3c: Regulatory* Expert Info					(0.26)
Actor Level Controls					
Group Type (Ref: Citizen Groups)					
Professional Groups	0.54	0.59	0.53	0.51	0.53
	(0.38)	(0.39)	(0.38)	(0.38)	(0.38)
Business & Firms	-0.80*	-0.83*	-0.80*	-0.82*	-0.80*
	(0.40)	(0.41)	(0.40)	(0.40)	(0.40)
Experts & Co	-0.50	-0.44	-0.50	-0.51	-0.50
	(0.35)	(0.36)	(0.35)	(0.35)	(0.35)
Economic Resources	0.11	0.17	0.11	0.12	0.11
	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
Perceived Media Attention	0.87***	1.03***	0.87***	0.87***	0.87***
	(0.14)	(0.13)	(0.14)	(0.14)	(0.14)
Pro Change	-0.14	-0.17	-0.14	-0.14	-0.14
	(0.25)	(0.26)	(0.25)	(0.25)	(0.25)
Camp Support	1.55**	1.42*	1.55**	1.55**	1.55**
	(0.58)	(0.59)	(0.58)	(0.58)	(0.58)
Organising Protest	0.27*	0.33**	0.25	0.27*	0.27*
	(0.11)	(0.11)	(0.34)	(0.11)	(0.11)
Org. Salience	0.02	0.14	0.02	0.03	0.02
	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
Issue Level Controls					
Salience	-0.01	-0.01	-0.01	0.25	-0.01
	(0.10)	(0.10)	(0.10)	(0.25)	(0.10)
Regulatory Issue	0.58*	0.54*	0.58*	0.57*	0.52
	(0.26)	(0.26)	(0.26)	(0.26)	(0.94)
Country (Ref: Germany)					
UK	-0.63	-0.40	-0.63	-0.70	-0.63
	(0.49)	(0.50)	(0.49)	(0.49)	(0.49)
Denmark	-0.27	-0.38	-0.27	-0.30	-0.27
	(0.45)	(0.46)	(0.45)	(0.45)	(0.45)
Sweden	0.56	0.51	0.56	0.53	0.56
	(0.47)	(0.48)	(0.47)	(0.47)	(0.47)
Netherlands	1.24**	1.24**	1.24**	1.18**	1.24**
	(0.44)	(0.45)	(0.44)	(0.44)	(0.44)
Constant	-1.79*	-1.21	-1.76+	-0.87	-1.76+
	(0.86)	(0.86)	(1.01)	(1.18)	(0.98)
Policy Issue Intercept	Yes	Yes	Yes	Yes	Yes
Number of Cases	374	374	374	374	374
AIC	1594	1609	1596	1595	1596

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Appendix I: Media Attention

As mentioned in the main paper, media attention can also be seen as a success. Table I therefore provides the analyses without controlling for perceived media attention, showing that the results stay robust. Instead of using perceived media attention, one could also control for the extent to which actors considered outside activities or mobilising the public as relevant, which would be more in line with how Tallberg et al. (2015) have operationalised outside lobbying. Outside Activity relies on two survey questions. The first item asks respondents how important they considered protest or other activities mobilizing the public as important, while the second item asks about how important survey respondents considered activities that would engage their members or stakeholders. The two items were added and divided by two so that the final variable ranges from 1-5. Table Ib provides an analysis controlling for outside activity instead of media attention, again not changing the results. The main analysis in the paper still considers perceived media attention as a variable as media attention (especially together with media saliency) should control out any kind of perceived media success, whereas the outside lobbying variable cannot do that. However, one could argue that actors who considered outside lobbying as quite important are also more likely to perceive media attention as a success. Table Ic therefore excludes actors that have considered organising protests or other activities to mobilise the public as important or very important which reduces the N to 290. Irrespective whether we control for perceived media attention in such a model or not, the effects stay the same.

Table I: Multilevel OLS Regression for Perceived Influence (SEs in Parentheses) not controlling for Perceived Media Attention

	(I1)	(I2)	(I3)	(I4)	(I5)
H1a: Expert Info	1.29***		1.28***	1.28***	1.30***
	(0.17)		(0.17)	(0.17)	(0.22)
H1b: Info Public Preferences	-0.27+		-0.21	-0.50+	-0.27+
	(0.14)		(0.30)	(0.29)	(0.14)
H2: Relative Expert Info		2.65***			
		(0.76)			
H3a: Public Support for Actor*			-0.11		
Public Info			(0.51)		
H3b: Salience*Public Info				-0.07	
				(0.07)	
H3c: Regulatory* Expert Info					-0.03
					(0.27)
Actor Level Controls					
Group Type (Ref: Citizen Groups)					
Professional Groups	0.56	0.65	0.56	0.54	0.56
	(0.40)	(0.42)	(0.40)	(0.40)	(0.40)
Business & Firms	-0.85*	-0.99*	-0.85*	-0.86*	-0.84*
	(0.41)	(0.44)	(0.41)	(0.41)	(0.42)
Experts & Co	-0.63+	-0.60	-0.62+	-0.64+	-0.63+
	(0.36)	(0.38)	(0.36)	(0.36)	(0.36)
Economic Resources	0.24+	0.42***	0.24+	0.25*	0.24+
	(0.12)	(0.13)	(0.12)	(0.12)	(0.12)
Pro Change	-0.01	-0.02	-0.01	-0.02	-0.00
	(0.28)	(0.30)	(0.29)	(0.28)	(0.29)
Camp Support	1.15+	0.85	1.16+	1.17+	1.15+
	(0.65)	(0.69)	(0.65)	(0.65)	(0.65)
Public Support for Actor	0.86	0.98	1.17	0.79	0.87
	(0.68)	(0.72)	(1.63)	(0.69)	(0.69)
Org. Salience	0.17	0.50***	0.17	0.18	0.17
	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Issue Level Controls					
Salience	-0.03	-0.04	-0.03	0.20	-0.03
	(0.10)	(0.11)	(0.10)	(0.27)	(0.10)
Regulatory Issue	0.71**	0.71*	0.72**	0.70**	0.83
	(0.27)	(0.28)	(0.27)	(0.27)	(0.99)
Country (Ref: Germany)					
UK	-0.76	-0.48	-0.76	-0.82	-0.76
	(0.51)	(0.54)	(0.51)	(0.52)	(0.51)
Denmark	-0.39	-0.61	-0.39	-0.41	-0.39
	(0.48)	(0.50)	(0.48)	(0.47)	(0.48)
Sweden	0.49	0.32	0.49	0.47	0.49
	(0.49)	(0.52)	(0.49)	(0.49)	(0.49)
Netherlands	1.14*	1.14*	1.14*	1.09*	1.14*
	(0.47)	(0.49)	(0.47)	(0.47)	(0.47)
Constant	-0.60	1.48	-0.76	0.23	-0.66
	(0.91)	(0.91)	(1.21)	(1.27)	(1.05)
Policy Issue Intercept	Yes	Yes	Yes	Yes	Yes
Number of Cases	380	380	380	380	380
AIC	1792	1834	1794	1794	1794

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Table Ib: Multilevel OLS Regression for Perceived Influence (SEs in Parentheses) using Outside Lobbying instead of Perceived Media Attention

	(I6)	(I7)	(I8)	(I9)	(I10)
H1a: Expert Info	1.23***		1.23***	1.23***	1.24***
	(0.17)		(0.17)	(0.17)	(0.22)
H1b: Info Public Preferences	-0.48**		-0.40	-0.73*	-0.48**
	(0.15)		(0.30)	(0.29)	(0.15)
H2: Relative Expert Info		3.76***			
		(0.77)			
H3a: Public Support for Actor* Public Info			-0.15		
			(0.50)		
H3b: Salience*Public Info				-0.08	
				(0.07)	
H3c: Regulatory* Expert Info					-0.02
					(0.27)
Actor Level Controls					
Group Type (Ref: Citizen Groups)					
Professional Groups	0.46	0.51	0.47	0.44	0.47
	(0.39)	(0.41)	(0.40)	(0.39)	(0.40)
Business & Firms	-0.93*	-1.01*	-0.93*	-0.95*	-0.93*
	(0.41)	(0.42)	(0.41)	(0.41)	(0.41)
Experts & Co	-0.36	-0.20	-0.35	-0.37	-0.36
	(0.36)	(0.37)	(0.36)	(0.36)	(0.36)
Economic Resources	0.18	0.27*	0.18	0.19	0.18
	(0.12)	(0.13)	(0.12)	(0.12)	(0.12)
Pro Change	0.04	0.02	0.04	0.03	0.05
	(0.28)	(0.29)	(0.28)	(0.28)	(0.28)
Camp Support	1.20+	1.04	1.21+	1.23+	1.20+
	(0.64)	(0.66)	(0.64)	(0.64)	(0.64)
Public Support for Actor	0.85	0.78	1.29	0.77	0.86
	(0.68)	(0.70)	(1.62)	(0.68)	(0.68)
Org. Salience	0.08	0.25+	0.08	0.08	0.08
	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Outside Activity	0.55***	0.79***	0.55***	0.54***	0.55***
	(0.14)	(0.13)	(0.14)	(0.14)	(0.14)
Issue Level Controls					
Salience	-0.04	-0.05	-0.04	0.21	-0.04
	(0.10)	(0.11)	(0.10)	(0.26)	(0.10)
Regulatory Issue	0.73**	0.73**	0.74**	0.72**	0.81
	(0.27)	(0.27)	(0.27)	(0.27)	(0.98)
Country (Ref: Germany)					
UK	-0.77	-0.50	-0.77	-0.84	-0.77
	(0.51)	(0.52)	(0.51)	(0.51)	(0.51)
Denmark	-0.30	-0.42	-0.30	-0.32	-0.30
	(0.47)	(0.49)	(0.47)	(0.47)	(0.47)
Sweden	0.58	0.52	0.58	0.55	0.58
	(0.49)	(0.50)	(0.49)	(0.49)	(0.49)
Netherlands	1.21**	1.22*	1.21**	1.15*	1.21**
	(0.46)	(0.47)	(0.46)	(0.46)	(0.46)
Constant	-0.99	0.17	-1.23	-0.09	-1.03
	(0.91)	(0.90)	(1.21)	(1.26)	(1.04)
Policy Issue Intercept	Yes	Yes	Yes	Yes	Yes
Number of Cases	374	374	374	374	374
AIC	1753	1777	1755	1754	1755

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Table Ic: Multilevel OLS Regression for Perceived Influence (SEs in Parentheses) excluding actors that considered Outside Lobbying as important or very important

	(I11)	(I12)	(I13)	(I14)
H1a: Expert Info	1.14***		1.41***	1.41***
	(0.18)		(0.19)	(0.19)
H1b: Info Public Preferences	-0.55***		-0.42**	-0.42**
	(0.15)		(0.16)	(0.16)
H2: Relative Expert Info		3.49***		
		(0.75)		
Actor Level Controls				
Group Type (Ref: Citizen Groups)				
Professional Groups	0.45	0.55	0.42	0.42
	(0.45)	(0.46)	(0.47)	(0.47)
Business & Firms	-1.29**	-1.37**	-1.28**	-1.28**
	(0.46)	(0.47)	(0.48)	(0.48)
Experts & Co	-0.67+	-0.63	-0.61	-0.61
	(0.39)	(0.40)	(0.41)	(0.41)
Economic Resources	0.32*	0.40**	0.46**	0.46**
	(0.14)	(0.14)	(0.14)	(0.14)
Pro Change	-0.06	-0.13	0.00	0.00
	(0.30)	(0.31)	(0.32)	(0.32)
Camp Support	1.27+	1.23+	1.19	1.19
	(0.71)	(0.74)	(0.75)	(0.75)
Public Support for Actor	0.99	0.86	0.82	0.82
	(0.70)	(0.71)	(0.73)	(0.73)
Org. Salience	-0.03	0.09	0.07	0.07
	(0.13)	(0.13)	(0.14)	(0.14)
Perceived Media Attention	0.82***	1.02***		
	(0.14)	(0.14)		
Issue Level Controls				
Salience	0.01	0.00	-0.04	-0.04
	(0.12)	(0.12)	(0.12)	(0.12)
Regulatory Issue	0.31	0.24	0.43	0.43
	(0.29)	(0.30)	(0.30)	(0.30)
Country (Ref: Germany)				
UK	-0.28	-0.04	-0.46	-0.46
	(0.53)	(0.55)	(0.56)	(0.56)
Denmark	0.01	-0.16	0.09	0.09
	(0.49)	(0.50)	(0.51)	(0.51)
Sweden	0.97+	0.82	1.02+	1.02+
	(0.51)	(0.52)	(0.54)	(0.54)
Netherlands	1.27**	1.26*	1.16*	1.16*
	(0.49)	(0.50)	(0.51)	(0.51)
Constant	-1.96*	-1.19	-0.96	-0.96
	(0.99)	(0.99)	(1.03)	(1.03)
Policy Issue Intercept	Yes	Yes	Yes	Yes
Number of Cases	290	290	290	290
AIC	1335	1351	1364	1364

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Note: Model 11-12 control for media attention, while Model 13-14 do not.

Appendix J: Testing the Effect of Information Types on Preference Attainment

The positions were coded while identifying the actors and thus rely on manual coding based on media statements, official documents and expert opinion. An actor's position was coded in favour, neutral or against the policy issue in question. If an actor's position was missing or coded as neutral, the self-reported position based on the survey was added. Policy change was coded relying on minutes of parliamentary meetings, legislative texts and media sources and were validated by the expert interviews. The final binary variable takes a value of 1 if the policy outcome was in line with the actor's position and a 0 if it was not.

Table J: Multilevel logistic regression model using Preference Attainment (SEs in Parentheses)

	(J1)	(J2)	(J3)	(J4)	(J5)
H1a: Expert Info	0.35+		0.36+	0.35+	0.32
	(0.19)		(0.19)	(0.19)	(0.23)
H1b: Info Public Preferences	-0.31*		-0.61+	-0.29	-0.31*
	(0.15)		(0.32)	(0.31)	(0.15)
H2: Relative Expert Info		1.86*			
		(0.80)			
H3a: Public Support for Actor*			0.56		
Public Info			(0.55)		
H3b: Salience*				0.01	
Public Info				(0.08)	
H3c: Regulatory*					0.09
Expert Info					(0.30)
Actor Level Controls					
Group Type (Ref: Citizen Groups)					
Professional Groups	-0.40	-0.40	-0.42	-0.40	-0.42
	(0.46)	(0.46)	(0.47)	(0.46)	(0.47)
Business & Firms	-0.48	-0.51	-0.49	-0.48	-0.49
	(0.45)	(0.45)	(0.46)	(0.45)	(0.45)
Experts & Co	-0.57	-0.59	-0.60	-0.57	-0.58
	(0.40)	(0.40)	(0.40)	(0.40)	(0.40)
Economic Resources	0.02	0.03	0.02	0.02	0.03
	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Perceived Media Attention	0.00	0.03	0.01	0.00	0.00
	(0.15)	(0.14)	(0.15)	(0.15)	(0.15)
Pro Change	-0.81**	-0.83**	-0.79*	-0.81**	-0.81**
	(0.31)	(0.31)	(0.31)	(0.31)	(0.31)
Camp Support	4.74***	4.77***	4.74***	4.73***	4.73***
	(0.79)	(0.79)	(0.79)	(0.79)	(0.79)
Public Support for Actor	2.38**	2.32**	0.75	2.38**	2.35**
	(0.74)	(0.73)	(1.73)	(0.74)	(0.74)
Org. Salience	-0.16	-0.14	-0.17	-0.16	-0.16
	(0.14)	(0.13)	(0.14)	(0.14)	(0.14)
Issue Level Controls					
Media Salience	0.14	0.14	0.15	0.12	0.14
	(0.16)	(0.16)	(0.17)	(0.32)	(0.16)
Regulatory Issue	0.59	0.58	0.56	0.59	0.28
	(0.42)	(0.42)	(0.42)	(0.42)	(1.13)
Country (Ref: Germany)					
UK	-0.23	-0.19	-0.23	-0.22	-0.23
	(0.71)	(0.70)	(0.71)	(0.71)	(0.71)
Denmark	-0.45	-0.48	-0.45	-0.45	-0.44
	(0.65)	(0.65)	(0.65)	(0.65)	(0.65)
Sweden	0.77	0.78	0.77	0.78	0.77
	(0.72)	(0.72)	(0.73)	(0.72)	(0.72)
Netherlands	0.44	0.45	0.45	0.45	0.44
	(0.67)	(0.67)	(0.67)	(0.67)	(0.67)
Constant	-2.02+	-2.05+	-1.17	-2.12	-1.88
	(1.18)	(1.16)	(1.43)	(1.52)	(1.28)
Policy Issue Intercept	Yes	Yes	Yes	Yes	Yes
Number of Cases	380	380	380	380	380
AIC	433	431	434	435	435

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001