

## Dynamics of Regulatory Policymaking in Sweden - The Role of Media Advocacy and Public Opinion

Rasmussen, A.; Romeijn, J.; Toshkov, D.

## Citation

Rasmussen, A., Romeijn, J., & Toshkov, D. (2018). Dynamics of Regulatory Policymaking in Sweden - The Role of Media Advocacy and Public Opinion. *Scandinavian Political Studies*, 41(1), 49-74. doi:10.1111/1467-9477.12108

Version: Not Applicable (or Unknown)

License: Leiden University Non-exclusive license

Downloaded from: <a href="https://hdl.handle.net/1887/70340">https://hdl.handle.net/1887/70340</a>

Note: To cite this publication please use the final published version (if applicable).

## Dynamics of Regulatory Policymaking in Sweden: The Role of Media Advocacy and Public Opinion

Anne Rasmussen\*, University of Copenhagen and Leiden University

Jeroen Romeijn, Leiden University

Dimiter Toshkov, Leiden University

This file is a post-print version (last updated 15 January 2018) of the article published in *Scandinavian Political Science* and available at <a href="https://doi.org/10.1111/1467-9477.12108">https://doi.org/10.1111/1467-9477.12108</a>

#### Abstract

While extensive literatures study the responsiveness of policy to public opinion and the influence of interest groups, few studies look at both factors simultaneously. This article offers an analysis of the influence of media advocacy and public opinion on political attention and policy change for four regulatory issues over a relatively long period of time in Sweden. The data pools together measures of public support for specific policies with new data on attention to the policy issues in the Swedish parliament, policy developments over time and detailed coding of the claims of interest advocates in two major Swedish newspapers. Analyzing this data, a complex picture without a general tendency for either public opinion or media advocacy to act as dominant forces in producing policy change is revealed, although some evidence is found that the public is successful in stimulating political attention when it supports policy proposals aimed at changing the status quo.

## **Keywords**

agenda-setting, interest groups, regulation, policy responsiveness, public opinion

\*Corresponding author: Address: Department of Political Science, University of Copenhagen, Øster Farimagsgade 5, Bygning 18, Building 18.2.12, 1353 Copenhagen K, Denmark. Email: ar@ifs.ku.dk

## Acknowledgements

We would like to thank Lisa Dellmuth, Ida Edvinsson and Lisa Westling for excellent research assistance. The article benefitted from comments from Andreas Dür, Linda Flöthe and participants in the ECPR General Conference in Prague, 7–10 September 2016. We are also grateful for helpful feedback from three anonymous reviewers and the editor of Scandinavian Political Studies. Finally, we acknowledge funding from Nederlandse Organisatie voor Wetenschappelijk Onderzoek, VIDI Grant 452-12-008, and Det Frie Forskningsraad, Sapere Aude Grant 0602-02642B.

## Introduction

The question of who gets the policies they desire is one of the central problems in the study of democratic governance. Normative accounts of democracy usually posit that the public's preferences should have an impact on the policies delivered by politicians (Dahl 1956). Accordingly, a large literature investigates the extent to which public opinion is related to policy (for reviews, see Shapiro 2011; Wlezien 2016). In parallel to this literature, another body of research considers an additional force in public policy making: the role of interest groups. In recent years, the extent to which lobby groups influence public policy has gained renewed interest and new designs to study interest group influence have been introduced (for an overview, see Dür 2008; Helboe Pedersen 2013; Bernhagen et al. 2014; Binderkrantz & Rasmussen 2015; Rasmussen et al. 2018). Although the question of how strong interest group influence really is remains unsettled (see, e.g., Lowery 2013), there is considerable normative criticism of strong interest group influence, which may not be desirable due to the risk of interest groups persuading policy makers to adopt policies that differ from those desired by the median citizen.

While large bodies of literature exist that examine policy responsiveness to the public and to interest groups separately, studies of public policy that integrate both factors are limited (for reviews, see Burstein & Linton 2002; Burstein 2014). Moreover, the evidence in the few existing studies (e.g., Gray et al. 2004; Gilens 2012; Lax & Phillips 2012; Burstein 2014; Gilens & Page 2014; Giger & Klüver 2016; Bevan & Rasmussen 2017) that examine both the impact of public preferences and interest groups on policy change is mixed. Most of these studies do

not examine the evolution of policies over time even if a diachronic perspective is crucial for judging the potential causal impact of interest groups and public opinion on public policy.

In this article, we seek to deepen our understanding of how the public and interest groups active in the media (referred to as 'media advocates') influence public policy by examining two aspects of policy making: political attention (the attention to specific policy issues in the legislature) and policy change. We focus on four policy issues for which public opinion has been measured over a relatively long time period in Sweden: the phasing out of nuclear energy; the introduction of a six-hour working day; allowing the sale of beer, wine and liquor in supermarkets; and lowering taxes on alcohol. The four issues are selected so that they exhibit variation in the extent of public and media advocacy support for policy change both between and within issues over time.

For each policy issue, we carefully trace the policy developments over 10–16 year time periods using a variety of data sources. We link this policy information to data on public opinion on these four issues provided by the SOM Institute (see the Online Appendix). In addition, to track media advocacy on these issues, we conduct a detailed media content analysis of all claims made by advocates on the policy issues in two major Swedish newspapers for the entire period of analysis. Our definition of media advocates covers a broad selection of non-state actors including 'traditional' interest advocates like labour unions, business associations and companies, but also actors such as scientists and think tanks.

We analyze the impact of media advocates and public opinion on public policy making in a mixed-methods design. We start with a quantitative analysis identifying the general patterns related to the dynamics of political attention and policy change in our dataset before examining these patterns at greater resolution in a set of in-depth studies of the individual policy cases. In this way we are able to scrutinize the mechanisms that drive political attention and produce change and to interpret the general findings in the context of the individual cases. Such a strategy is especially well-suited to the study of policy change, as this is typically a rare event that is not easily modelled statistically (Goemans 2007).

We find some support for the hypothesis that public opinion affects political attention, but our findings invite scepticism as to the ability of either public opinion or media advocacy to strongly influence policy making. The evidence is particularly striking with respect to the production of actual policy change where neither the media advocates nor public opinion seem

to play a leading role in any of our cases. Despite the high public support and considerable media advocacy support that some of the proposals for policy change have enjoyed, we observe only one genuine case of policy change in our dataset – and, remarkably, this one case has occurred in a context of modest public support and net opposition from media advocates.

These findings are important given the common expectation that the extent to which these two types of actors affect policy change should be inversely related. Worries about interest group influence are voiced partly because such influence is expected to come at the expense of diminished influence of the public, based on the expectation that groups, such as those active in the media, are not representative of broader public opinion. However, rather than finding a trade-off in the influence of these two types of actors, we discover little evidence that any of them play a strong role in our cases. This finding matters because, especially in a country with strong democratic credentials like Sweden, one would expect public opinion to have a stronger impact on the attention paid to policy issues and policy change than in other countries. The implication is that neither advocacy nor public opinion may impact political attention or specific policy changes as much as is often assumed by the academic literature and citizens alike.

## **Public Opinion and Interest Groups as Drivers of Public Policy**

Most of the studies of policy responsiveness (for reviews, see Shapiro 2011; Wlezien 2016) examine either static congruence between public opinion and concrete policies (e.g., Lax & Phillips 2012) or dynamic responsiveness between public opinion and indirect proxies for policy, such as spending (Mortensen 2010; Soroka & Wlezien 2010), attention (Mortensen 2010; Bevan & Jennings 2014; Alexandrova et al. 2016) or latent constructs, such as the 'policy mood' (Stimson et al. 1995). Attention to policy issues during the agenda-setting stage and policy change are typically studied in isolation, while both of these aspects are important for understanding public policy making. In this article we study the influence of both public opinion and interest groups on political attention and on policy change in a diachronic design that analyzes concrete policy proposals with a methodology integrating quantitative analysis with in-depth case evidence. Combining a dynamic approach with a focus on concrete policy proposals provides us with additional leverage to assess the causal relationships between opinion, interest groups and policy.

Empirical studies of the link between public opinion and policy generally find ample evidence that the two are related, although some studies are somewhat sceptical regarding the strength of the link between public opinion and (American state) policy. In a comparison across policies and jurisdictions, Lax and Phillips (2012, 149) emphasize that the likelihood of policy being in line with the public opinion majority is roughly speaking equal to flipping a coin. Dynamic approaches to the study of the link between public policy and policy usually find stronger links and argue that public opinion drives policy change. Yet, as they mostly use indirect and/or aggregate policy indicators, it remains difficult to connect their insights to the study of specific policy changes.

Studies of the representation of the public in policy have been criticized for not considering other factors, such as group advocacy that may confound the relationship between public opinion and policy – leading to fears that the impact of public opinion on policy is overestimated (Burstein & Linton 2002; Burstein 2014). However, just as with public opinion, it is not straightforward to assess the causal impact of interest groups and advocates on policy. For many years, this led scholars to examine other questions (De Bièvre & Dür 2007), but lately there has been a growth in studies that have presented new research designs for studying influence (for a review, see Dür 2008). While groups may act as a transmission belt helping to transfer public views to policy makers (Rasmussen et al. 2014), group involvement in politics might also lead to bias in policy making. This happens if decision makers listen to interest groups due to the resources they may offer, even when groups do not represent the median voter. So it may seem surprising that, for a very long time, separate bodies of literature have examined how public opinion and interest advocates influence policy making.

The few studies that do include both interest groups and public opinion find varying results about the impact of groups on policy making. Some reach the conclusion that they matter (Gilens 2012; Lax & Phillips 2012; Gilens & Page 2014). Others present a more mixed view (Gray et al. 2004; Bevan & Rasmussen 2017) echoing a trend in existing interest group scholarship of influence to find 'only mixed or weak results' (Lowery 2007). The differences in findings are interesting given that the vast share of existing research focuses on the American political system. However, rather than being contradictory, it is possible that they result from differences in analysis designs and operationalizations. It may, for example, be harder to find strong relationships in studies using crude indicators of groups and policy, such as when group

counts are related to either policy liberalism (e.g., Gray et al. 2004) or attention to broader policy areas (e.g., Bevan & Rasmussen 2017), than in studies linking policy positions to outcomes on specific policies (Gilens 2012; Gilens & Page 2014). In the latter there may be a closer match between the explanatory and outcome variables since we can be confident that the interest group measures and outcomes relate to the same policies.

Moreover, even among studies of specific policies, it may matter how information about group preferences is collected. Those that measure interest group preferences based on the views of the most powerful interest groups only (e.g., Gilens 2012; Lax & Phillips 2012; Gilens & Page 2014) could, for example, be more likely to find a relationship between their measures and policy outcomes than those which consider (activities of) a wide selection of groups (Burstein 2014). Ultimately, it is important to be sensitive to such differences in approaches when comparing the findings from the different studies.

We opt for an issue-specific approach measuring advocacy and public opinion on concrete topics, which has the advantage that we do not have to assume that politicians react to general ideological views of the population or overall volumes of group activity when adopting specific policies. Moreover, we emphasize the need for studies to look at interest group opinions and activities, on the one hand, and the trajectory of these specific policies over long periods of time, on the other, while considering the potentially competing or complementary effects of public opinion.

To date, only a few American studies on social movement activity and specific policies adopt such a design, and they typically focus on one type of policy or interest only (Burstein & Freudenburg 1978; McAdam & Su 2002; Soule & Olzak 2004; Soule & King 2006; Agnone 2007; Olzak & Soule 2009). We supplement these studies with a detailed analysis of how claims reported in the media by a wide range of advocates are related to political attention and policy change on four different policy issues over long time periods, while accounting for the dynamics of public opinion as well.

# The Hypothesized Effects of Public Support and Media Advocacy on Political Attention and Policy Change

Theoretically, there are at least two ways in which politicians can respond to citizens and media advocates in the process of public policy making. The first focuses on political attention, meaning that politicians discuss and consider issues that citizens and interest groups care about. The second puts emphasis on substantive policy outcomes and examines whether the opinions of citizens and groups are in fact reflected in actual policy outcomes (Berry et al. 2002) and whether policy changes are in line with public preferences. Political attention and policy change can be considered as two steps in the policy-making process that provide opportunity for responsiveness to public opinion and interest groups. Not only is political attention (and discussions in the legislature) a necessary step for policy change, but the former can also substitute to some extent for the latter. Discussing an issue can signal responsiveness to the wishes of the general public or special interests even when real policy change is not feasible. Therefore, we analyze both outcome variables in the current article.

## The Public Opinion-Policy Linkage

There are good theoretical reasons to expect that politicians in democratic political systems will be responsive to the public. As politicians are – at least partially – driven by the desire to be reelected (Stimson et al. 1995), they would want to respond to shifts in the public desire for a given type of policy by introducing policy changes. When the public exhibits strong support for a policy proposal that is different from the status quo, politicians and political parties can increase their appeal to the citizens by enacting the policy proposal. Otherwise, they risk being viewed as unresponsive to the wishes of the public and out of touch with what the citizens want, with negative electoral consequences. This dynamic is reinforced when party elites have positive views of the rationality of public opinion (as is the case in Sweden), which increases the likelihood that they consider the public's wishes (Ekengren & Oscarsson 2011).

However, even when policy change is impossible – for political, technological or other reasons – politicians can still signal responsiveness to the public by bringing the issue to the political agenda and discussing it in the legislative arena. When the public, and especially the part with strong opinions on the policy issue, favours an alternative policy proposal, it implies that it is dissatisfied with the policy status quo. In that case, there are political points to be

scored by debating the underlying policy problem and putting it on the political agenda. And, in any case, making and debating policy proposals is, of course, a necessary step before actual policy change – a point corroborated by a study finding that the attention paid to a policy area in the Danish parliament is related to spending on that same issue (Mortensen 2010). Therefore, we expect that public opinion will affect both political attention and policy change:

H1a: The higher the public support for a policy proposal (that is different from the policy status quo), the more attention politicians will pay to the issue.

H1b: The higher the public support for a policy proposal, the more likely that the policy proposal will be enacted.

## Media Advocates and Representation

Yet even when the public strongly supports a policy alternative, it needs to compete for political attention and influence with other actors, among which interest groups and advocates loom large. The media are an important venue for advocates and have become increasingly important in the communication between politicians and citizens (Mazzoleni & Schulz 1999). Advocates that want to raise awareness of an issue or change policy often have to rely on the media in addition to other strategies to achieve their goals (Binderkrantz 2005), and media advocacy in European countries has received increasing attention recently (Binderkrantz et al. 2015, 2017). The idea that many interest groups rely on media attention is also evidenced by the fact that news coverage in the media offers a somewhat closer reflection of the overall composition of the Danish interest group population than other arenas (Binderkrantz et al. 2015).

In theoretical terms, advocates use the media to pursue at least two goals. Firsty, actors who want to change the status quo will likely try and raise attention for the policy issue. Previous studies have shown that advocates tend to actively lobby at specific points in time and on specific issues (Baumgartner et al. 2009), usually around policy junctures when policy may change. Hence, we expect claim-making by advocates to occur around specific periods in time and to drive political attention to the policy issue.

H2: The higher the number of advocates making claims in the media on an issue, the more attention politicians will pay to the issue.

Theoretically, we should not expect that the number of media advocates on an issue as such should influence the likelihood of policy change. This is because the media advocates can split

in supporting conflicting proposals for policy change or face a counter-mobilization in defence of the status quo. Therefore, it is the relative support by the population of media advocates that a policy proposal receives that should affect the likelihood of policy changes, rather than the overall volume of advocacy. In other words, when the population of advocates is dominated by actors supporting a policy alternative different from the status quo, there should be a higher chance that policy will change in the direction that these advocates prefer (Gilens 2012; Lax & Phillips 2012; Gilens & Page 2014). Similarly, we expect that if there is high relative support among the media advocates in support of a policy proposal (that is currently not the policy in place), this will put more pressure on politicians to address it – thus increasing political attention to the issue. To summarize the preceding discussion:

H3a: The higher the relative media advocacy support for a policy proposal that would change the policy status quo, the more attention politicians will pay to the issue.

H3b: The higher the relative media advocacy support for a policy proposal, the more likely that the policy proposal will be enacted.

## **Research Design**

We examine the hypotheses presented above in an empirical study of four policy issues in Sweden. Sweden distinguishes itself by the availability of high quality longitudinal data on public opinion on specific policy questions enabling us to examine a period of time that is relatively long compared to existing studies of policy responsiveness. Focusing on a single country also allows us to keep the institutional context constant across policy issues and over time. Sweden is a vibrant representative democracy with a stable party system, free media and a well-established system of interest representation – all features that should make Sweden a likely case for finding responsiveness to public opinion compared to other political systems. In contrast, Sweden might offer less favourable conditions for media advocacy to influence policy making as a result of its corporatist tradition where policy is often decided in collaboration with the types of interest groups who have been granted privileged insider access to the political system itself (Siaroff 1999; Öberg et al. 2011).

## Selection of Policy Issues

The sampling frame from which we draw our four cases is constrained by the availability of longitudinal data on public opinion. However, the set of specific policy issues on which relatively long time-series on public opinion data are available in Sweden does not seem biased towards policy issues on which policy change has not happened yet and involves issues of varying media saliency. To control for the fact that the policy type of an issue (Lowi 1964) might affect the overall level of advocacy, we select regulatory policy issues only. In addition, our issues are selected to ensure variation in public opinion and media advocacy support both between the issues and within issues over time. As discussed below, our sample includes a policy proposal for which public support went from positive to negative to positive again, one that remained positive and two that went from positive to negative during our study period. One proposal was supported by a minority of media advocates, another had majority support and the level of support switched over time for the remaining two. The issues also vary in the volume of advocacy they generated, again both between issues and over time for the same issue (see Figure A2 in the Online Appendix). The selection results in the following policy proposals: the phasing out of nuclear energy; the introduction of a six-hour working day; allowing the sale of alcohol<sup>1</sup> in supermarkets; and lowering taxes on alcohol<sup>2</sup>.

These four issues vary in terms of the amount of media debate they generate, both across issues and within them over time. As an example, the newspapers Svenska Dagbladet and Dagens Nyheter published, on average, 28 articles a year about the phase-out of nuclear energy, but only five about allowing the sale of alcohol in supermarkets. Our issues also vary in terms of the amount of political attention they receive. At most, the nuclear issue featured in 3.5 percent of all documents produced by the Riksdag in a given year. As an example, this is comparable to the very salient (in Sweden) topics of NATO membership (3.9 percent of all documents in a year) and privatizing elderly care (3.6 percent of all documents) during the same observation period, which suggests that, at its peak, the nuclear issue was very high on the political agenda. The other issues were less salient. Having variation in media saliency is

<sup>&</sup>lt;sup>1</sup> The formulation on the question of alcohol sales in Swedish refers to 'livsmedelbutiker', which is a slightly broader category of stores than just supermarkets.

<sup>&</sup>lt;sup>2</sup> The question on alcohol taxes refers to taxes on beer, wine and spirits, but since these cover most alcoholic beverages, we discuss them as 'taxes on alcohol'.

important since it may influence the ability of citizens and media advocates to influence policy making (Lax & Phillips 2012).

## Unit of Analysis

We focus on concrete policy proposals to ensure a direct match between the way the public opinion survey items are phrased and the policy options we track, and we stick to a narrow interpretation of the survey questions (e.g., we refrain from assuming that lack of public support for increasing taxes is equivalent to public support for decreasing taxes). The advantage is that our measures attain high face and construct validity. The concreteness of our definition of the unit of analysis raises a relatively high bar for finding responsiveness, but we see this as a positive feature of our approach enabling us to connect public opinion, media advocacy and public policy directly, without further assumptions about the nature and dimensionality of the underlying policy space.

#### Measurement and Data

We consider both political attention and policy change. The former is defined as the attention to a policy issue in the legislature and measured as the number of documents that address a certain policy issue publicized by the Swedish parliament (Riksdag) in a year. The documents were retrieved from the online archive of the Riksdag and include the minutes from plenary sessions; motions, reports and legislative proposals by the government; reports by organizations that are associated with the Riksdag; and plenary proposals by parliamentary committees. Since the measure includes documents that are presented by the government, it measures more than just the Riksdag's agenda and we consider it a proxy for the attention paid to the issue by politicians.

To measure the second outcome of interest we construct a comprehensive picture of the policy developments on the four issues during the period of analysis. For each hypothesis we thoroughly and systematically study and use a wide variety of written sources: legislative documents, policy briefs, media analyses, as well as existing academic literature. For the statistical analysis we construct a binary variable that tracks whether national policy changed in line with the policy proposal as expressed in public opinion in a particular year.

Turning to the explanatory variables, we rely on data from the SOM Institute at the University of Gothenburg (see the Online Appendix) to measure public opinion. This is a rather

exceptional data source as the public has been asked about its opinion on the exact same policy issues for at least ten years. This is important given that existing large-N scholarship on responsiveness has been criticized for not being able to assess the specificities and developments of specific policies (e.g., Petry & Mendelsohn 2004). Based on this data, we construct a measure of public support for a policy proposal defined as the percentage of the Swedish public who think the policy proposal is 'good' or 'very good' from those with an opinion (those who think the proposal is 'good', 'very good', 'bad' or 'very bad').

To capture our variables tracking media advocacy, we coded statements in the media. For each of our policy issues, we conducted a search in two major broadsheet newspapers: Svenska Dagbladet and Dagens Nyheter. While Sweden lacks a newspaper that clearly represents the left side of the political spectrum, we select two newspapers that describe themselves as independent-conservative and independent-liberal, respectively. Differences in ideological orientation might affect which interest groups are covered (see Binderkrantz et al. 2017)<sup>3</sup>.

Having retrieved the relevant articles on all four issues for our entire observation period, we manually coded all 2,219 articles to identify all statements about the policy issue and classified the type of advocates who made the statement and the tone of the statement. We only code one statement per advocate per article, but one advocate could have been included several times in each year. As mentioned, we use an encompassing, behavioural definition of 'interest advocates' (Baroni et al. 2014) rather than limit the definition to non-state advocates with certain organizational structures. However, since we are interested in the impact of different societal actors on responses by politicians, we exclude statements by political actors, such as representatives from political parties and government officials, as well as private individuals.

To capture the volume of media advocacy, we track the total number of statements that was recorded in each year on an issue. This measure includes neutral statements as well, and serves as an indication of the extent to which advocates raised the issue in the media. Altogether, we record 401 statements by a total of 262 actors on our four policy issues.

<sup>&</sup>lt;sup>3</sup> While it is important to rule out such bias in coverage, we do not expect pronounced differences between them in practice. In fact, both newspapers also stress that they aim at providing neutral coverage except on their opinion pages. The fact that most statements by non-state actors about the six-hour work day (a policy on which one would expect these two newspapers to be ideologically opposed) were in favour of the policy, supports this expectation.

To measure media advocacy support we calculate the percentage statements by advocates in the media in favour of a policy proposal published in a given year from all media statements that expressed an opinion, either positive or negative, on the specific policy proposal<sup>4</sup>.

## **Empirical Analyses**

### Aggregate Patterns

We will now present the results of the aggregate-level analyses starting with models of political attention. Since this outcome variable is a count measure and not normally distributed (see Figure A1 in the Online Appendix), we used negative binomial regression (King & Zeng 2001). The distribution is also over-dispersed so that a standard Poisson count model would be a poor fit to the data. We present four models: model 1 has the main variables of interest but no interactions; model 2 adds the interaction between public opinion support and the policy status quo; model 3 includes the interaction between media advocacy support and the status quo instead; and model 4 includes both interactions. In all models, we lagged the explanatory variables with one year to ascertain the causal direction of influence between attention, on the one hand, and public opinion and media advocacy activity, on the other. We also include separate intercepts for each policy issue (issue 'dummies') to take into account potential unobserved heterogeneity between them, and we add a lagged dependent variable to address potential autocorrelation in political attention over time.

Table 1 presents the results from the four estimated negative binomial regression models. According to the results, the (lagged) values of public support are positively and significantly associated with higher political attention. Moreover, the positive effect all but disappears for the cases when the policy proposal on which public support is expressed is in fact the policy status quo (see the negative interactions in models 2 and 4, which, however, are not statistically significant at conventional levels; see also the left panel of Figure 1 for a graph of the effects). Media advocacy support for a proposal as such does not seem to be significantly associated with the political attention to an issue in the legislature. However, the significant negative interaction with the status quo (see models 3 and 4) implies that when media advocacy is

<sup>&</sup>lt;sup>4</sup> More information on the coding scheme, the codebook and classification of actors can be found online at: http://www.govlis.eu

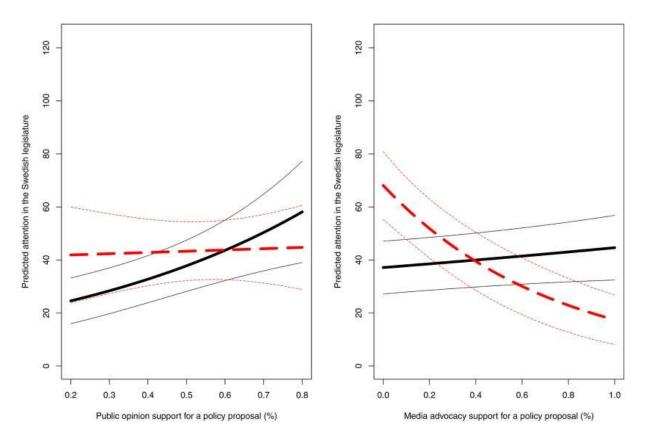
supportive of the status quo, the discussion of the policy issues tends to be minimal (see the right panel of Figure 1).

**Table 1:** Negative binomial (quasi-poisson) statistical models of political attention to four policy issues in the Swedish legislature (raw coefficients; standard errors in parentheses).

Effect	(1)	(2)	(3)	(4)
Public support (%)	1.13` (.38)	1.89* (.79)	.95 (.60)	1.43` (.75)
Relative media advocacy support (%)	07 (.19)	.00 (.19)	.19 (.18)	.18 (.18)
Media advocacy volume	.01 (.01)	.01 (.01)	.01 (.01)	.01 (.01)
Political attention in previous year	.01` (.00)	.00 (.00)	.01* (.00)	0.01` (.00)
Status quo	/	1.25 (.84)	.55* (.26)	1.31 (.77)
Public support * Status quo	/	-1.63 (1.38)	/	-1.33 (1.27)
Media advocacy support *Status quo	/	/	-1.60*** (.53)	-1.55* (.53)
Issue dummies (ref.=Phase-out nuclea energy)	r			
Six-hour work week	-1.67*** (.32)	-1.62*** (.36)	-1.41*** (.33)	-1.50** (.34)
Alcohol taxes	69*** (.21)	43 (.29)	41 (.27)	39 (.27)
Sale of alcohol in supermarkets	64*	35	28	24
(Intercept)	(.22) 3.29*** (.38)	(.31) 2.70*** (.51)	(.28) 2.88** (.42)	(.28) 2.66*** (.47)
Dispersion parameter	3.84	3.69	3.11	3.08
N	47	47	47	47

Notes: Raw coefficients. Significance levels:  $\dagger p < 0.1$ ;  $\ast p < 0.05$ ;  $\ast \ast p < 0.01$ ;  $\ast \ast \ast p < 0.001$ . Standard errors in parentheses. Dependent variable: Number of documents addressing a particular policy issue in the Swedish parliament (Riksdag) in a year. All independent variables lagged with one year. One-year lagged values of the dependent variable included in all models.

**Figure 1** Predicted Number of Agenda Items Discussed in the Swedish Parliament as a Function of Lagged Public Support for a Policy Proposal (Left Panel) and Lagged Relative Media Advocacy Support (Right Panel), according to the Estimates of Model 4 (Table 1).



Notes: Other variables held at mean or typical values. Black lines: Proposal is not the status quo. Red dashed lines: Proposal is the status quo. Plotted with 95 percent confidence intervals of the means of the predictions.

Finally, we find no support for H2 that the volume (number) of media advocate claims on a policy proposal affects political attention.

Figure 1 illustrates the scale of the effects by plotting the predicted probability of the number of agenda items discussed in the Swedish parliament as public support (left) and relative media advocacy support (right) range from the minimum to the maximum of their respective observed ranges (according the estimates of model 4; other variables set at median or typical values; the thin lines present 95 percent confidence intervals of the means of the predictions). The figure also illustrates the interaction effects as the predictions are drawn separately for scenarios when the proposal is the status quo (dashed red line) and when it is not (solid black line). In line with our expectation in H1a, higher public support for a policy increases political attention when it signals dissatisfaction with the status quo, but not otherwise: when public

support moves from its minimum to its maximum, the level of predicted political attention more than doubles (left panel; black line).

When relative media advocacy support moves from its observed minimum to its observed maximum, the predicted number of agenda items being discussed decreases three times, but only when the policy proposal being polled is the current status quo (right panel; red lines). This implies that high relative support for the status quo suppresses political attention to the issue. Importantly, though, there is no evidence that advocates interested in changing the policy status quo are successful in stimulating political attention, contrary to what we hypothesized. It should be remembered, however, that our sample includes relatively few observations for which the proposal is the status quo and that these all concern one policy issue from the four. This invites caution in interpreting the predicted probabilities plotted in Figure 1.

Below, we present a closer examination of the policy developments of policy on the four issues over time to scrutinize the mechanisms that drive political attention and produce change and to interpret the general findings presented above in the context of the individual cases. In order to provide an analysis of policy responsiveness, the qualitative discussion of our cases below places specific emphasis on the instance in which policy changed in line with how the proposal was formulated in the opinion poll (i.e., the closure of the second reactor at Barsebäck), to improve our understanding of how this policy change came about.

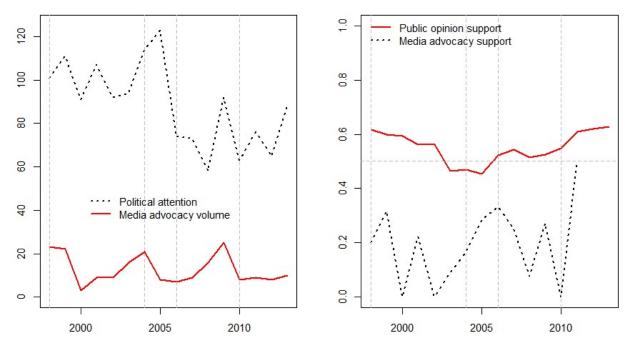
To facilitate the discussion of each case, we present several figures for each policy issue – with the first representing the overall attention paid to the issue in the media and by Swedish politicians over time, and the second representing the relative public and media advocacy support for a policy proposal related to the issue. For each case, we systematically examine the policy developments and their possible relationship with public opinion and media advocacy support to evaluate our hypotheses and the mechanisms behind the links.

## Nuclear Energy

Almost half of all Swedish energy is nuclear, which has been a salient topic in the country's politics (IEA 2014). After a 1980 referendum, Sweden decided to phase-out nuclear energy by 2010, but this deadline was abandoned in 1997 in favour of a policy of long-term phase-out with no specific end-date (Holmberg & Hedberg 2010). The policy change was part of a cross-party energy agreement between the Social Democratic Party (Socialdemokraterna), the Centre

Party (Centerpariet) and the Left Party (Vänsterpartiet), which advocated the 2010 phase-out deadline in the 1980 referendum. In 1998 the decision was made to close the first of two reactors at the nuclear power plant at Barsebäck. The decision was eventually carried out in 2001. In 2004 the then-governing Social Democratic Party and its energy partners decided to close the second reactor at Barsebäck by 2005. This decision constitutes the one instance of policy change in our dataset that is in line with the proposal as phrased in the public opinion survey – namely, to phase-out nuclear energy. The right-wing government that came to power in 2006 reversed the phase-out and eventually abolished the phase-out plans in 2010.

**Figure 2** Political and Media Attention (Left Panel) and Public Opinion and Advocacy Support (Right Panel) regarding the Proposal for Phasing-out Nuclear Energy.



*Notes:* Political attention: Number of documents addressing a particular policy issue in the Swedish parliament (Riksdag) in a year. Media advocacy volume: Number of relevant statements by interest groups and advocates on the policy proposal in Svenska Dagbladet and Dagens Nyheter in a year. Public opinion support: Percentage of the public who think the policy proposal is 'good' or 'very good' from those with an opinion. Media advocacy support: Percentage of statements by advocates in the media in favour of a policy proposal published in a given year from all media statements that expressed an opinion on the specific policy proposal. The vertical dotted lines indicate relevant policy events and Table A3 in the Online Appendix lists the specific policy changes.

While the plan to close the second reactor at Barsebäck had already been discussed in 2001 and 2003, both the energy partners in the government and other political parties argued that

renewable energy sources were not developed enough to make up for the expected loss in production from the shutdown. When the energy partners did decide to close the second reactor at Barsebäck in 2004 as part of their long-term phase-out goal, they faced strong opposition from several directions. Not only were the other parties in the right-wing bloc strongly opposed, but public opinion and media advocacy (see below) had also turned against the phase-out (see Figure 2).

Hence, on the face of it, the actions of the Swedish government do not seem particularly responsive to public opinion at the time. However, while closing reactors at Barsebäck, the government actually allowed other developments that undermined the impact of the phase-out plans. For example, a large nuclear power plant in Oskarshamn was completely renovated to expand its lifespan, and another company (Fortum) was allowed to expand the production capacity of its existing reactors. Combined, these developments largely offset the effects of the closures at Barsebäck over the course of the ensuing years.

This would seem to be an opportunity for the Swedish energy partners to flag their responsiveness to public opinion, but surveying both the media and parliamentary debates at the time reveals that the government continued to present their policy as a long-term phase-out. After the new right-wing government came to power in 2006, public support for a phase-out actually increased with a majority favouring a phase-out when the government decided to abolish the policy in 2010. The increase in public support for a phase-out after 2011 can be attributed at least to some extent to the Fukushima disaster (Holmberg 2011; Holmberg & Hedberg 2013). This shift in public opinion led to an increase in political attention, but no steps towards a phase-out of nuclear energy were taken in response.

Altogether, we can conclude that policy making regarding the nuclear phase-out was not directly responsive to public opinion (H1b), even if, in line with our aggregate findings, more support for a proposal to change the status quo did seem to coincide with more political attention to the issue in 2011 (H1a)<sup>5</sup>.

From the right panel of Figure 2, it is clear that statements in the media by advocates were more negative than positive about the phase-out policy throughout almost the entire observation

<sup>&</sup>lt;sup>5</sup> This finding is somewhat contrary to the interpretation of Holmberg and Hedberg (2010), who find a close match between public opinion and policy output in Sweden. This discrepancy may be due to their broader focus (on all nuclear power policy) and the fact that their study only covers the period before the Fukushima disaster.

period. Most of the statements were made by power companies owning Swedish nuclear power plants – with the owner of Barsebäck – Sydkraft – being especially vocal in its opposition. Other advocates, such as labour unions and experts warning of increased CO2 emissions also spoke out against the phase-out.

There is no clear relationship between the number of statements in the media and political attention (H2) (see the left panel of Figure 2), even if both political attention and the number of claims in the media spiked around the policy changes in 2004 (the decision to close Barsebäck) and 2009 (when the new right-wing government announced it would abolish the nuclear phase-out policy). However, these spikes in attention seem to be driven by counter-mobilization against government plans by, for instance, the owner of the Barsebäck reactors, rather than by proactive agenda-setting through the media by these actors.

Media advocacy also did not have a clear impact on policy change (H3b). However, several actors that made many of the negative claims about the phase-out policy do seem to have had a more subtle effect on the implementation of the decision to close the second Barsebäck reactor. By refusing government attempts to come to an agreement regarding the closure of nuclear reactors, industry actors (especially Sydkraft) were able to force the Swedish government to pay high levels of compensation for the closure <sup>6</sup>. Moreover, the same government allowed several energy companies to expand their production of nuclear energy in subsequent years.

The media advocates, who were largely against a phase-out, did attain their preferences after the 2006 election. However, this may be more a consequence of an overlap between the preferences of media advocates and those of the new pro-nuclear power government than the result of effective (media) advocacy. Additionally, in 2005, the Centre Party (previously part of the energy agreement and of the right-wing bloc) changed its decades-long position in favour of a phase-out to one against, which paved the way for the abolishment of the policy<sup>7</sup>. All in all, then, the image emerges that even if policy sometimes did not follow the preferences of media advocates (as with the closure of Barsebäck 2), these actors did eventually attain their

<sup>&</sup>lt;sup>6</sup> Sydkraft was compensated for all costs related to the closure and given ownership of a reactor with the same capacity as Barsebäck 2, which was owned by Vattenfal. Vattenfal, in its turn, was also compensated financially.

<sup>&</sup>lt;sup>7</sup> This interpretation is corroborated by other studies that have concluded that political considerations and partisan politics have historically been important in Swedish policy making on nuclear power (Nohrstedt 2010; Roßegger & Ramin 2013).

preferences or were compensated when they did not. When it comes to political attention, the relative increase in support for the phase-out by the media advocates in the wake of the Fukushima disaster (when the phase-out policy was not the status quo) was followed by increased political attention, providing some support for H3a.

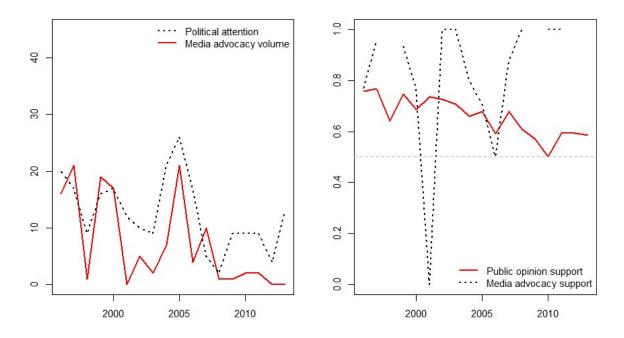
### Six-hour Working Day

The next proposal for policy change we analyze is the introduction of a six-hour working day. The idea of shortening the working day to six hours has been around for decades and was experimented with by Swedish companies and public service providers as early as the 1980s. The idea is also regularly picked up in international news media. The Swedish government commissioned expert committee reports on the six-hour working day (Rohdén 2000), and in recent years also funded a trial at a care facility. Still, there has been no formal policy change on the issue. In line with our general findings, it seems that the public was successful in spurring parliamentary debate of the issue, which received quite some attention in the Riksdag (H1a). However, this attention did not lead to policy change (H1b), even if public support for the proposal was very strong, if decreasingly so, over time: the public was more positive than negative in all years but 2010 (Figure 3).

This lack of adoption of a policy proposal that is very popular among the public does not seem to have been caused by a strong counter-mobilization of advocates in the media. The level of advocacy support fluctuated significantly, partly due to the overall low number of relevant statements. Moreover, these statements – made mostly by experts, LO (Sweden's largest labour organization) and companies – were mostly positive about the six-hour working day. The opponents may have considered the proposal so unlikely to be implemented that they did not feel the need to mobilize to defend the status quo and express their preferences in the media. In any case, advocacy efforts in the media did not lead to a policy change (H3b), but the volume of advocacy claims and the amount of political attention both peeked around 2005, providing some support for H2b. During this peak in the number of claims (see Figure 3), positive and negative claims were balanced, which may explain why the peak in attention did not lead to further policy activity or more future political attention (H3a and H3b): when more actors did briefly mobilize and political attention increased, mobilization was stronger among those who were opposed to the six-hour work day.

The six-hour working day emerges as a very popular policy proposal, both among media advocates and the public, even if there is some reason to expect that counter-mobilization did not occur as actors did not deem the policy's introduction immanent. Given that the introduction of such a policy would be a major departure from international practices, it is perhaps not so surprising that the Swedish government has not implemented it yet, despite the support it enjoys.

**Figure 3:** Political and Media Attention (Left Panel) and Public Opinion and Advocacy Support (Right Panel) regarding a Six-hour Working Day.

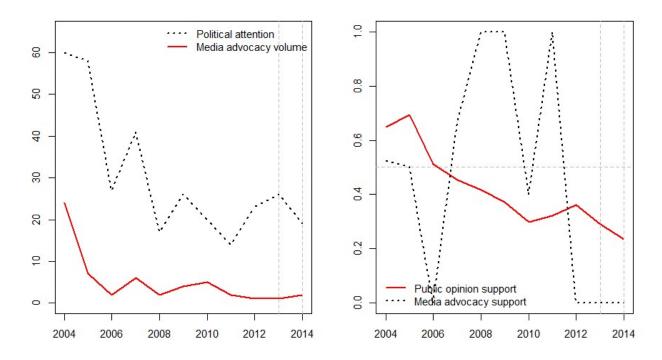


*Note:* For definitions of the variables, see the notes to Figure 2.

## Alcohol Sale and Taxes

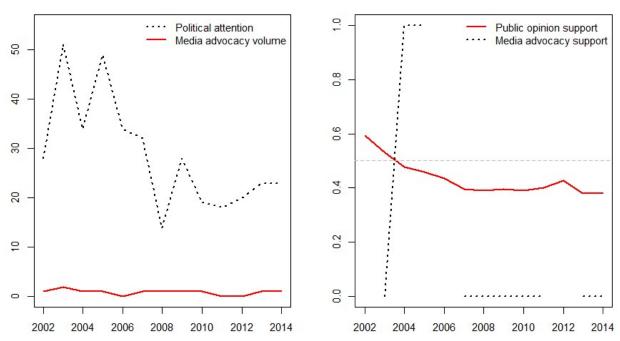
The next two policy proposals we discuss relate to the regulation of alcohol use, so we discuss them together. Alcohol regulation policy in Sweden is more restrictive than in most other European countries (Karlsson & Osterberg 2001) and has traditionally focused on a strategy to lower consumption that combines high prices with limited availability. Although Sweden has had to loosen some of its restrictive policies since joining the European Union, the country retains considerable freedom to formulate its own policies.

**Figure 4** Political and Media Attention (Left Panel) and Public Opinion and Advocacy Support (Right Panel) regarding Lowering Alcohol Taxes.



*Note:* For definitions of the variables, see the notes to Figure 2.

**Figure 5** Political and Media Attention (Left Panel) and Public Opinion and Advocacy Support (Right Panel) with regard to Allowing the Sale of Alcohol in Supermarkets.



*Note:* For definitions of the variables, see the notes to Figure 2.

This is evidenced by the two alcohol-related policies in our study: alcohol taxes, which are comparatively high in Sweden; and the sale of alcohol, which is only possible in Swedish stores under a state monopoly (called 'Systembolaget'). For both issues, political attention was high during the start of our observation period, but declined shortly after 2005 (see Figures 4 and 5). These relatively high levels of attention and media debate (in the case of lowering taxes) are likely related to several developments that increased attention. Importantly, 2004 was the year all EU member states were required to allow the import of alcohol for personal use, and fears existed that the Swedish policy of high pricing and restricted access would be undermined.

Both proposals for changing the policies (i.e., lowering alcohol taxes and relaxing the sale restrictions) were popular among the public at the start of our observation period (Figures 4 and 5). While the main government party at the time, the Social Democrats, was not unfavourable to these proposals, it did not initiate policy change – possibly in order to accommodate its junior coalition partners. As expected in H1a, and in line with the results in our aggregate analysis, as public support for the proposals declined throughout the observation period, so too did political attention. Similarly, even when the right-wing political parties that had earlier expressed support for both proposals came to power in 2006, they did not lower taxes on alcohol or relax laws regarding alcohol sale. In fact, these parties raised taxes on alcohol in 2013 and 2014, whereas the sale of alcohol in supermarkets remained banned. Given that public support for both policies had sharply dropped at this point, this pattern is consistent with H1b.

It is worth noting that media advocacy support varies strongly on both issues, partly due to the low number of advocacy statements (see Figures 4 and 5). Most claims were made by health experts and actors involved in the sale of alcohol, and have not left an obvious mark on the enacted policy changes (H3b). Moreover, even though the number of statements regarding alcohol taxes dropped as political attention also declined (in line with H2), most statements were reactions to political plans rather than proactive strategies aimed at setting the agenda. Due to the low total number of statements, positive statements also did not clearly affect political attention for the issue (H3a). To conclude, the story of alcohol regulation policies is one in which the Swedish public largely got what it wanted, while media advocacy was much less important and reactive.

## Conclusion

In this study we set out to investigate how the preferences of the general public and interest groups active in the media affect policy making. We focused on a small number of regulatory policy issues in Sweden and observed them over relatively long periods of time. We examined both the occurrence of policy change and the attention the policy issues received in the legislature using aggregate and issue-level analyses. The selection of a relatively low number of issues allowed us to analyze each one in depth and to trace the details behind the aggregate associations we found in the data.

Our findings reveal a complex picture, but the overall message is that there is not much evidence in favour of strong effects of either public opinion or media advocacy. If anything, when the public strongly dislikes a proposal, policy might be adapted to reflect its wishes, as seems to have happened when taxes on alcohol were raised in 2013 and 2014, but strong support for a proposal is not necessarily translated into policy change. While in the two alcohol regulation issues public opinion and regulation seemed to move in synchrony, when it comes to regulating the duration of the working day and nuclear phase-outs, there is quite some disconnect between the dynamics of public opinion and policy. Yet, stronger public support for a proposal is associated with more discussion of the issue in parliament.

We find even less evidence that media advocacy matters. The aggregate-level analysis revealed no clear effects of media advocacy on attention for an issue, other than very low levels of political attention when the media advocates are strongly in favour of the status quo. When looking more closely at the cases, there is some evidence that politicians sometimes find ways to accommodate media advocacy pressure without changing formal policy. An example is the phase-out of nuclear power, where, in spite of closing the Barsebäck reactor, the Swedish government allowed the expansion of existing plants, which was a policy action in line with advocate claims in the media and against public preferences. In this case, media advocates do not seem to have lived up to the ideal of acting as a transmission belt between the public and the government, but, if anything, worked to prevent public preferences from being turned into policy.

Some of these null findings might be due to the fact that policy change is rare and that the greatest potential for public opinion and interest groups to influence policy might be for 'non-decision-making' (i.e., to keep issues off the agenda). Although our study covers relatively long

time periods compared to most existing analyses, our data still contains very few policy events. This is in itself a substantively interesting finding as it reminds us that the policy status quo is rather stable, and the lack of policy change is possibly over-determined. One might need a very special confluence of factors to change policy, and strong support by the public and/or interest advocates might not be sufficient, and not even necessary for such change. In fact, there is some evidence in our case studies that political elites can play a strong role both when it comes to deciding to change policy as well as to keep popular issues off the political agenda. Rather than casting a view of policy making as involving a simple trade-off between responding to the views of either media advocates or the public, we find several instances where politicians decide to follow a third course (for a similar view of Swedish politics, see Esaiasson & Holmberg 1996; Holmberg 1997). This suggests that politicians are aware of and rhetorically responsive to public preferences, but that they are not always able or willing to implement popular proposals, contrary to what many in the literature assume. It also implies that studying political attention alone is not sufficient since even politicians who are rhetorically responsive may not be able to then deliver actual policy.

Finally, our results indicate that often interest groups may not be well placed to strengthen the responsiveness of policy to public opinion. The case studies suggest instead that other considerations may take primacy over public preferences when it comes to the actual introduction of policies.

Our findings are even more significant given our initial expectation that Sweden would be a likely case for experiencing a high degree of responsiveness due to its strong reputation of political accountability and well-established system of interest representation. In addition, it is remarkable that we find no impact of public opinion on policy change on issues on which the public has been polled for its policy preferences. The continuous polling implies that the public has been assumed to have meaningful and well-formed preferences with regard to the policy options on these issues. Moreover, polls may be more likely to be conducted on salient issues where there is greater pressure on the policy makers to be responsive. Still, when public preferences supported change in our cases, change did not occur<sup>8</sup>.

<sup>&</sup>lt;sup>8</sup> For interest groups, it is less clear whether salience weakens or strengthens their impact, which is likely to depend on whether their position enjoys public support (Rasmussen et al. 2018). Interest groups may have a greater say over policies that the public cares less about, while on issues where groups and the public are united increasing the public visibility of an issue may be positive for them.

There is scope for future research to investigate these relationships further by expanding our approach to analyzing a larger number of policies and a broader range of countries. The sample of policy issues we study implies certain limitations about the generalizability of our inferences. All four issues can be considered regulatory ones. It is possible that policy making on distributive and redistributive issues generates a different dynamic and is embedded in different institutional settings so that public opinion and/or interest groups play systematically different roles on such issues. Importantly, labour unions and employers' organizations have direct access to the negotiation table when it comes to issues related to employment conditions, labour market policy or pensions. Still, corporatism in Sweden has been on the decline (Lindvall & Sebring 2005) and one of our issues – the introduction of the six-hour workday – has both regulatory and distributive aspects, so the relevance of our findings beyond the universe of regulatory policy issues should not be dismissed entirely.

It will also be possible in future research to expand our study beyond that of advocacy claims and statements in the media. Focusing on media advocacy means that we can map group involvement in a replicable way over a long time period without being dependent on the memory of experts or the use of formal ways of consultation on the issues. However, (print) media is but one strategy used by interest groups, and it remains possible that they have an impact through other, more covert channels. Our findings should therefore be scrutinized in future work comparing multiple channels of lobbying.

We also believe there are benefits to a continued use of a multi-method approach to explore the complex relationship between these different actors and policy. The combination of methods we employed in the analysis allowed us to look beyond the aggregate patterns that the statistical analyses provided and interpret the results. We showed how our aggregate findings can be interpreted only in light of the specific policy issue context and in light of issue-specific information about the evolution of the policies. With this, our approach tries to bridge the quantitative literatures on policy responsiveness and interest group influence and the case study scholarship on policy evolution. As we demonstrated, both the quantitative and case-specific parts of our study had a lot to benefit from each other.

#### References

Agnone, J. (2007) Amplifying public opinion: The policy impact of the US environmental movement. *Social Forces*, 85, 1593-1620.

Baroni, L., Carroll, B., Chalmers, A. W., Marquez, L. M. M. & Rasmussen, A. (2014) Defining and classifying interest groups. *Interest Groups & Advocacy*, 3, 141-159.

Baumgartner, F. R., Berry, J. M., Hojnacki, M., Leech, B. L. & Kimball, D. C. (2009) *Lobbying and policy change: Who wins, who loses, and why,* Chicago and London, University of Chicago Press.

Bernhagen, P., Dür, A. & Marshall, D. (2014) Measuring lobbying success spatially. *Interest Groups & Advocacy*, 3, 202-218.

Berry, J. M., Portney, K. E. & Thomson, K. (2002) *The rebirth of urban democracy*, Brookings Institution Press.

Bevan, S. & Jennings, W. (2014) Representation, agendas and institutions. *European Journal of Political Research*, 53, 37-56.

Bevan, S. & Rasmussen, A. (2017) When does Government Listen to the Public? Voluntary Associations & Dynamic Agenda Representation in the United States. *Policy Studies Journal*.

Binderkrantz, A. S. (2005) Interest Group Strategies: Navigating Between Privileged Access and Strategies of Pressure. *Political Studies*, 53, 694-715.

Binderkrantz, A. S., Bonafont, L. C. & Halpin, D. R. (2017) Diversity in the News? A Study of Interest Groups in the Media in the UK, Spain and Denmark. *British Journal of Political Science*, 47, 313-328.

Binderkrantz, A. S., Christiansen, P. M. & Pedersen, H. H. (2015) Interest group access to the bureaucracy, parliament, and the media. *Governance*, 28, 95-112.

Burstein, P. (2014) American public opinion, advocacy, and policy in Congress: What the public wants and what it gets, New York, Cambridge University Press.

Burstein, P. & Freudenburg, W. (1978) Changing public policy: The impact of public opinion, antiwar demonstrations, and war costs on senate voting on Vietnam war motions. *American Journal of Sociology*, 84, 99-122.

Burstein, P. & Linton, A. (2002) The impact of political parties, interest groups, and social movement organizations on public policy: Some recent evidence and theoretical concerns. *Social Forces*, 81, 380-408.

Dahl, R. (1956) A preface to democracy theory, Chicago and London, The University of Chicago Press.

De Bièvre, D. & Dür, A. (2007) Interest group influence on policymaking in Europe and the United States. *Journal of Public Policy*, 27, 1-12.

Dür, A. (2008) Measuring interest group influence in the EU: A note on methodology. *European Union Politics*, 9, 559-576.

Ekengren, A.-M. & Oscarsson, H. (2011) Party Elites' Perceptions of Voters and Public Opinion. *Scandinavian Political Studies*, 34, 101-122.

Esaiasson, P. & Holmberg, S. (1996) Representation from above: Members of parliament and representative democracy in Sweden, Dartmouth Publishing Company.

Firth, D. (1993) Bias reduction of maximum likelihood estimates. *Biometrika*, 80, 27-38.

Giger, N. & Klüver, H. (2016) Voting against your constituents? How lobbying affects representation. *American Journal of Political Science*, 60, 190-205.

Gilens, M. (2012) Affluence and influence: Economic inequality and political power in America, New York, Princeton University Press.

Gilens, M. & Page, B. I. (2014) Testing theories of American politics: Elites, interest groups, and average citizens. *Perspectives on politics*, 12, 564-581.

Goemans, H. E. (2007) Qualitative methods as an essential complement to quantitative methods. IN Bennett, A., and others (Ed.) Symposium: Multi-method work, dispatches from the front lines." Qualitative methods: Newsletter of the American Political Science Association organized section on qualitative methods 5.

Gray, V., Lowery, D., Fellowes, M. & McAtee, A. (2004) Public opinion, public policy, and organized interests in the American states. *Political Research Quarterly*, 57, 411-420.

Helboe Pedersen, H. (2013) Is measuring interest group influence a mission impossible? The case of interest group influence in the Danish parliament. *Interest Groups & Advocacy*, 2, 27-47.

- Holmberg, S. (1997) Dynamic Opinion Representation. Scandinavian Political Studies, 20, 265-283.
- Holmberg, S. (2011) Kärnkraftsopinionen pre-Fukushima (Nuclear power opinion pre-Fukushima). IN Holmberg, S. W., Lennart (Ed.) *Lycksalighetens ö*. Gothenburg, University of Gothenburg.
- Holmberg, S. & Hedberg, P. (2010) *The will of the people? Swedish nuclear power policy*. Göteborgs Universitet: Statsvetenskapliga Institutionen.
- Holmberg, S. & Hedberg, P. (2013) *Energy opinion compared across time and space*. Gothenburg, University of Gothenburg, SOM Insitute.
- Karlsson, T. & Osterberg, E. (2001) A scale of formal alcohol control policy in 15 European countries. *Nordisk Alkohol Och Narkotikatidskrift*, 18, 117-128.
  - King, G. & Zeng, L. (2001) Logistic regression in rare events data. *Political analysis*, 9, 137-163.
- Lax, J. R. & Phillips, J. H. (2012) The democratic deficit in the states. *American Journal of Political Science*, 56, 148-166.
- Lindvall, J. & Sebring, J. (2005) Policy reform and the decline of corporatism in Sweden. *West European Politics*, 28, 1057-1074.
- Lowery, D. (2007) Why do organized interests lobby? A multi-goal, multi-context theory of lobbying. *Polity*, 39, 29-54.
- Lowery, D. (2013) Lobbying influence: Meaning, measurement and missing. *Interest Groups & Advocacy*, 2, 1-26.
- Lowi, T. J. (1964) American business, public policy, case-studies, and political theory. *World politics*, 16, 677-715.
- Mazzoleni, G. & Schulz, W. (1999) "Mediatization" of politics: A challenge for democracy? *Political Communication*, 16, 247-261.
- McAdam, D. & Su, Y. (2002) The war at home: Antiwar protests and congressional voting, 1965 to 1973. *American Sociological Review*, 696-721.
- Mortensen, P. B. (2010) Political Attention and Public Policy: A Study of How Agenda Setting Matters. *Scandinavian Political Studies*, 33, 356-380.
- Nohrstedt, D. (2010) Do advocacy coalitions matter? Crisis and change in Swedish nuclear energy policy. *Journal of public administration research and theory*, 20, 309-333.
- Öberg, P. O., Svensson, T., Christiansen, P. M., Nørgaard, A. S., Rommetvedt, H. & Thesen, G. (2011) Disrupted exchange and declining corporatism: Government authority and interest group capability in Scandinavia. *Government and Opposition*, 46, 365-391.
- Olzak, S. & Soule, S. A. (2009) Cross-Cutting Influences of Environmental Protest and Legislation. *Social Forces*, 88, 201-225.
- Petry, F. & Mendelsohn, M. (2004) Public opinion and policy making in Canada 1994-2001. *Canadian Journal of Political Science / Revue canadienne de science politique*, 37, 505-529.
- Rasmussen, A., Carroll, B. J. & Lowery, D. (2014) Representatives of the public? Public opinion and interest group activity. *European Journal of Political Research*, 53, 250-268.
- Rasmussen, A., Mäder, L. K. & Reher, S. (2017) With a Little Help From The People? The Role of Public Opinion in Advocacy Success. *Comparative Political Studies*, 1-26.
- Rohdén, H. (2000) Starka skiljelinjer i åsikterna om sextimmarsdag (Strong dividing lines in views about six-hour working day). *Det nya samhället. Red: Holmberg, Sören & Lennart Weibull*.
- Roßegger, U. & Ramin, R. (2013) Explaining the ending of Sweden's nuclear phase-out policy: a new approach by referring to the advocacy coalition framework theory. *Innovation: The European Journal of Social Science Research*, 26, 323-343.
- Shapiro, R. Y. (2011) Public opinion and American democracy. *Public Opinion Quarterly*, 75, 982-1017. Siaroff, A. (1999) Corporatism in 24 industrial democracies: Meaning and measurement. *European Journal of Political Research*, 36, 175-205.
- Soroka, S. N. & Wlezien, C. (2010) *Degrees of democracy: Politics, public opinion, and policy,* New York, Cambridge University Press.
- Soule, S. A. & King, B. G. (2006) The stages of the policy process and the Equal Rights Amendment, 1972–1982 1. *American Journal of Sociology*, 111, 1871-1909.

- Soule, S. A. & Olzak, S. (2004) When do movements matter? The politics of contingency and the equal rights amendment. *American Sociological Review*, 69, 473-497.
- Stimson, J. A., MacKuen, M. B. & Erikson, R. S. (1995) Dynamic representation. *American Political Science Review*, 89, 543-565.

Wlezien, C. (2016) Public Opinion and Policy Representation: On Conceptualization, Measurement, and Interpretation. *Policy Studies Journal*, Early view.

## Online Appendix

**Table A1: Descriptive statistics** 

Variable	Minimum	Mean	Maximum	St. dev.
Public support (%)	22	53	77	13
Relative media advocacy support (%)	0	42	100	41
Media advocacy volume	0	7	25	8
Political attention	2	41	123	34

Public support is measured as the percentage of the public in favor of the policy change in a year. Relative media advocacy support measures the percentage of statements in favor of the policy of the total number of statements by advocates in a year. Media advocacy volume measures the total number of statements by advocates in a year. Political attention measures the total number of documents produced in the Riksdag that mentions the issue.

Table A2: Time periods of analysis per policy issue

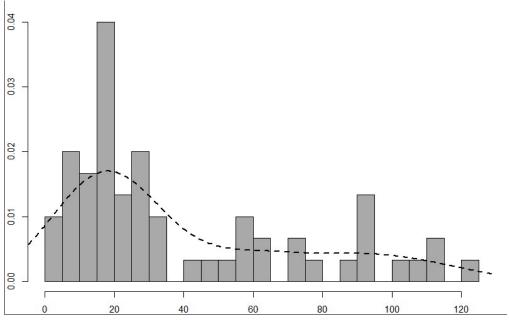
Variable	Star year	End year	N observations	N policy changes (in line/total)
Phasing-out nuclear energy	1998	2013	16	1/3
Introduction of a six-hour working day	1996	2013	18	0/0
Decreasing tax on alcohol sales	2002	2014	13	0/2
Allowing the sale of alcohol in supermarkets	2004	2014	11	0/0

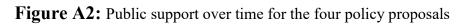
Policy changes 'in line' are policy changes that were in conformity with public opinion on an item as it was formulated in the survey question (for example a policy was introduced to phase-out nuclear energy), policy changes that were not in line went in the opposite direction (for example revoking the phase-out policy).

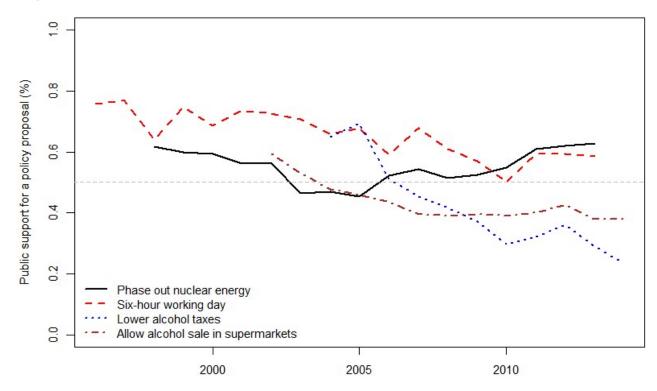
Table A3: Policy changes marked in Figures 2 and 4

Issue	Year	Policy change
Phasing-out nuclear energy	1998	Decision to close the first reactor at Barsebäck
Phasing-out nuclear energy	2004	Decision to close the second reactor at Barsebäck
Phasing-out nuclear energy	2006	Decision not to close any more reactors until 2010
Phasing-out nuclear energy	2010	Decision to abolish the phase-out policy
Decreasing tax on alcohol sales	2013	Decision to raise taxes on alcohol sales
Decreasing tax on alcohol sales	2014	Decision to raise taxes on alcohol sales

*Figure A1:* Histogram (probability density) of political attention (the number of documents produced by the Riksdag that mentions the policy issue) to a policy issue in a year (N=58).







## List of public opinion sources used in the paper:

- University of Gothenburg, SOM Institute. (2012). *National SOM 2002*. Version 1.0. Swedish National Data Service.
- University of Gothenburg, SOM Institute. (2012). *National SOM 2003*. Version 1.0. Swedish National Data Service.
- University of Gothenburg, SOM Institute. (2012). *National SOM 2004*. Version 1.0. Swedish National Data Service.
- University of Gothenburg, SOM Institute. (2012). *National SOM 2005*. Version 1.0. Swedish National Data Service.
- University of Gothenburg, SOM Institute. (2012). *National SOM 2006*. Version 1.0. Swedish National Data Service.
- University of Gothenburg, SOM Institute. (2012). *National SOM 2007*. Version 1.0. Swedish National Data Service.
- University of Gothenburg, SOM Institute. (2012). *National SOM 2008*. Version 1.0. Swedish National Data Service.
- University of Gothenburg, SOM Institute. (2012). *National SOM 2009*. Version 1.0. Swedish National Data Service.
- University of Gothenburg, SOM Institute. (2012). *National SOM 2010*. Version 1.0. Swedish National Data Service.
- University of Gothenburg, SOM Institute. (2012). *National SOM 2011*. Version 1.0. Swedish National Data Service.
- University of Gothenburg, SOM Institute. (2013). *National SOM 2012*. Version 1.0. Swedish National Data Service.
- University of Gothenburg, SOM Institute. (2013). *National SOM 2013*. Version 1.0. Swedish National Data Service.
- University of Gothenburg, SOM Institute. (2014). *National SOM 2014*. Version 1.0. Swedish National Data Service.
- University of Gothenburg, SOM Institute. (2013). *The SOM Institute Cumulative Dataset 1986-2011*. Version 1.0. Swedish National Data Service.