

Does Timing Matter?

How campaign periods affect parties' reactions to the public

Daniel Bischof*

March 2, 2018

Abstract

Democratic theory understands elections as an edict to hire or fire political representatives. Thus, if elections are imminent political parties will pay careful attention to the mood of the median voter to maximize their re-election chances. Therefore, I argue that during campaigns parties will be more likely to respond to the median voter and are less likely to respond to protesters in an effort to seek re-election. A new and unique data-set has been created that contains rhetorical party positions on nuclear energy – revealed in interviews, press statements, and press conferences – for 67 parties in 12 democracies. My analysis shows that parties are more responsive to the median voter during campaign periods, while protesters' activity leads to a backlash effect in party rhetoric. The findings have important implications for our understanding how campaign periods affect party behavior.

word count=10578

Department of Political Science, University of Zurich (CH); db@danbischof.com. I am grateful for the funding of my PhD studies by the European Research Council Starting Grant (Grant 284277) within the ResponsiveGov project during which this paper was written.

1 Introduction

Elections are one of the most theorized institutions suggested to keep politicians and political parties responsive and responsible (Dahl 1971; Ferejohn 1986; Powell 2000). They are perceived as an edict to hire and fire political representatives: On election day the electorate makes a decision to trust in the same representatives in the future or to swap political responsibility to fresh faces. In turn, during campaign periods political parties and their candidates are understood to pay close attention to public grievances and desires in an effort to maximize votes and secure office benefits (Downs 1957; Strøm 1990). In this respect the timing of elections should moderate politicians' behavior. Political parties can be expected to pay more attention to the public will when campaigning for (re-)election.

In several studies such campaigning effects have been studied for American Presidents and the Congress (Kuklinski 1978; Tufte 1978; Cohen 1999; Canes-Wrone and Shotts 2004; Rottinghaus 2008). Yet, to my knowledge far fewer studies investigate electoral cycle and campaigning effects in comparative perspective (Klüver and Sagarzazu 2015; Sagarzazu and Klüver 2015; Meyer and Wagner 2016; Sagarzazu and Klüver 2015). This paper aims to address this research gap by arguing that political parties' strategically adapt their behavior during campaign periods.

I study how political parties adapt their responses to public opinion and protest in comparative perspective – arguably two of the most crucial external stimuli which seek to attract parties' attention. More specifically I argue that during campaigns political parties respond differently to public claims than outside of them. Since parties are assumed to maximize their electoral payoffs during campaigns, they should be eager and more likely to respond to the median voter when campaigning for office. In contrast, parties should be less interested to represent the interests of protesters – which are frequently reflecting minority interests in the electorate. Thus, during campaigns political parties might face the dilemma to be able to respond only to the median voter or the mobilized masses, but not to both.

The theoretical argument is tested on a new and unique dataset of parties'

rhetorical reactions to public claims after the Fukushima meltdown in twelve countries. Overall, I find support for my theoretical conjecture. Campaign periods lead political parties to increase their attention to the median voter. Yet, at the same time political parties become less likely to represent the interest and positions of political protesters. In fact, my results suggest that protest during campaign periods will lead to a backlash effect: during campaigns political parties are significantly more outspoken against the interest of protesters in the case of nuclear energy studied here. This backlash effect is only mitigated if protests and public opinion are aligned. These findings are robust across a set of different model specifications.

The findings have important implications for how we understand the effect of elections on party agendas and the repercussions of protest. Political protest seems to play a larger and more important role for party competition than previous research suggests. My results highlight that protests is an important signal for political parties and parties react to protesters' claims – albeit in means that are unfavorable for protesters and their policy interests.

2 The electoral cycle and responsiveness

Understanding the interdependence between public demands and policy is central to the study of democracy (Dahl 1971). A rich body of literature shows that political parties and governments adapt their positions and policies towards public opinion (Adams et al. 2004; Adams, Haupt, and Stoll 2008; Klüver and Spoon 2016; Miller and Stokes 1963; Page and Shapiro 1983; Stimson, Mackuen, and Erikson 1995; Soroka and Wlezien 2012). Even though these studies amplify our theoretical and empirical comprehension of the accountability of political parties to the public, they mainly employ annual measurements to judge how responsive governments are to the public. Appropriate for the task to estimate whether parties react to public claims, such measures veil the daily responses representatives give to their people (Rottinghaus 2008).

As a result our knowledge on how parties respond to public opinion between

elections is comparably limited. While a rich body of literature looks into how politicians and political parties shape their agendas between elections in the US (Kuklinski 1978; Thomas 1985; Canes-Wrone and Shotts 2004; Rottinghaus 2008), to the best of my knowledge only a handful of studies investigate such electoral cycle effects outside of the American context (Klüver and Sagarzazu 2015; Sagarzazu and Klüver 2015; Meyer and Wagner 2016; Helbling and Tresch 2011). However, none of the listed comparative studies explicitly investigates whether parties react differently to voters if elections are imminent.

Yet, it seems crucial for the studies of representation and responsiveness to question how political parties represent public opinion along the entire electoral cycle and not only to focus on their behavior during elections. First, studies on the US context highlight that politicians are more likely to adapt their issue priorities and positions when the next election is imminent (Kuklinski 1978; Thomas 1985; Bernstein, Wright, and Berkman 1988; Ahuja 1994; Canes-Wrone and Shotts 2004; Rottinghaus 2008). Thus it appears that most comparative studies on party responsiveness focus on the most likely case to observe party responsiveness – namely campaign periods. Second, new experimental evidence suggests that specifically the daily rhetoric by politicians have tangible consequences for voters' perceptions of party positions (Fernández-Vázquez 2016*b*; Grose, Malhotra, and Van Houweling 2015). Voters living in the age of social media might be more likely to judge parties based on their visible daily activities. Thus, it seems crucial to scrutinize parties' behavior during the entire electoral cycle in order to grasp a complete picture of the representational linking between voters and parties.

This would also allow political scientists to embrace the complex set of external influences seeking to affect party politics (Burstein 2014). Arguably, public opinion is not the only factor seeking to influence politicians' standpoints, even though presumably the most distinct one. Frequently the public agenda appears to be more complex than single point estimates measured through public opinion polls suggest. For instance, political protest has become a crucial toolbox through which the masses

seek to affect political parties and their policies (Dalton 2008; Dalton, Van Sickle, and Weldon 2009; Barnes et al. 1979).

3 How campaigning matters

This paper seeks to study if parties respond differently to external stimuli during campaign periods. Thereby it aims to speak to the research gap outlined above. I will focus on two key external stimuli – namely the median voter and protesters. Building on the findings of the US context discussed above, I suspect that the successful influence of these stimuli should be conditioned by their timing.

More specifically I argue that parties become more likely to notice and respond to external stimuli during campaign periods. Campaign periods lead the media to focus their agenda extensively towards parties, their candidates and their policy offers (Harris, Fury, and Lock 2006; Andersen, Tilley, and Heath 2005; Gelman and King 1993; Banducci and Karp 2003; van Aelst et al. 2008). Thus, voters are more frequently exposed to messages by parties and politicians. As Gelman and King suggest such campaign intensity might enlighten voters (Gelman and King 1993: 433-448; Lodge, Steenbergen, and Brau 1995). Eventually campaigns should advance and foster voters' knowledge about the preferences of candidates (Nadeau et al. 2008; Lodge, Steenbergen, and Brau 1995). Through the media voters can seek information about where candidates stand on different policies and potentially use this information to cast their vote for the one candidate or party standing ideologically closest to their own preferences.

In turn, political parties feel that their candidates and their policies stand in the limelight. Thus, party behavior should be affected by the amplified attention by the media. In campaigns parties compete with each other for voters and seek to maximize their electoral payoffs in order to secure their reelection (Mayhew 1974; Downs 1957; Strøm 1990). In order to secure reelection parties have an incentive to minimize the perceived ideological distance between their own ideology and the median voter. Put differently, parties should become more prone to respond to voters

and highlight their ideological agreement with voters during campaign periods.¹

Arguably parties should face the exact same incentive outside of campaign periods. However, there are at least two reasons why this should be less the case outside of campaign periods. First, citizens' voting preferences should be preliminary driven by recent policy decisions and positions as these are the ones they are most likely to remember (Thomas 1985: 97). Meaning that outside of campaign periods political parties might feel more leeway to maneuver and to represent more controversial ideas and positions. As Elling (1982: 76-77) put it: "Given the limited awareness of congressional actions characteristic of most voters, an assumption that the electorate has a relatively short memory seems warranted." Research in political behavior has further underpinned this statement. Scholars stress that while voters might not directly recall particularly details about candidates' campaign activities, their overall evaluations of candidates and parties still very well reflect on candidates' actions particularly during campaigns (Lodge, Steenbergen, and Brau 1995: 310-311).

Second, it is the nature of campaigns that politicians need to give promises in electoral campaigns which they cannot implement prior to election date. Therefore, the nature of most political campaigns is prospective. In this vein, electoral campaigns can deliberately be used by politicians to give promises for the mid- and longterm future without the pressure to deliver policy in the short term. During campaign periods the issue agenda of politicians is likely to significantly shift to policies and decisions which are subject to implementation after a successful election. Thus, politicians might try to pander public claims and concerns to maximize their electoral fortunes without the commitment to implement policies in line with their rhetoric in the long run (Fernández-Vázquez 2016a). In contrast, outside of campaign periods political parties are expected to deliver on their promises, to draft policy and to govern. This makes it more difficult for parties to say the one thing and then do the opposite (Bischof 2018). Thus, given these arguments I derive my first hypothesize:

¹Of course many other factors (party identification, scandals, sympathy etc.) could affect for which party voters cast their votes. Yet, *ceteris paribus* ideology has been shown to be a crucial factor driving votes.

- **Median Voter Hypothesis:** During campaign periods political parties are more likely to represent the median voter.

Given the arguments outlined above it seems to be uncontroversial that parties face incentives to respond to the masses during campaign periods in an effort to maximize their electoral potentials.

Yet, as mentioned above politicians are exposed to a divergent set of actors seeking to influence their positions and decisions. Thus, even though they face a single electorate, voters express their opinions through multi-faceted channels. Another key external actor seeking to influence politics is political protest. However, I will argue below that in contrast to the median voter hypothesis above, parties face little incentives to respond to protest during campaign periods.

Political protest is regularly a weak and confusing source of information for political parties. Protests often lack turnout (Lohmann 1993; DeNardo 1985), endurance (Eisinger 1973), organizational resources (Gamson 1990) and disruptiveness (McAdam and Su 2002). Protests are, thus, disadvantaged amongst informational resources when seeking the attention of political parties. From this perspective political protest regularly expresses the interests of political minorities.

Therefore, if parties seek to maximize votes during campaigns they should face little incentives to respond to political protest during electoral campaigns. Representing interests of minorities comes with the risk of thereby disagreeing with the majority opinion. Even if this is not the case, representing a minority opinion of protesters might come with costs for political parties. The silent masses could take to the street as well in an effort to counter-mobilize against the minority. Subsequently parties might then be punished by voters for being unresponsive to their preferences, while holding up minority interests. Responding to the mobilized masses, thereby, comes with an exponential uncertainty about the electoral payoffs at election day. Therefore, I suggest that parties will ignore protesters' claims during their campaigns. In contrast, outside of campaign periods they might be more willing to respond to protesters' claims in an effort to align with new voters without facing the risk of

immediately losing an election.

- **Protest Hypothesis:** During campaign periods political parties are more likely to ignore protesters' claims.

Clearly, protest does not always reflect the opinion of a minority: the grievances shared during protest events might as well be rooted in the general public. This can manifest in large numbers of participants during protest events. However, the number of participants during protests do not necessarily mirror the support of protesters' preferences by the public. Turnout during protest is also a function of a wide set of other factors which can be broadly summarized under the term of costs and collective action problems (Tucker 2007; Ostrom 1998). Thus, the second hypothesis stipulated above might be moderated by the support or rejection of protesters' claims by the median voter. Parties might not perceive protest as representing minorities in case a larger fraction of the public supports protesters' claims. Therefore, during campaigns parties might meet protesters with open ears if they sense that the public supports the grievances put forward by protesters. Parties might sense such an occasion as an opportunity to gain new voters, without ignoring the interests of the public at large or as means to satisfy public grievances before facing it during elections.

- **Conditional Protest Hypothesis:** During campaign periods political parties are more likely to respond to protesters' claims if the public at large supports protesters' claims.

4 Data & how to measure the rhetoric of parties

To analyze whether parties respond differently to public opinion and protest during campaign periods, longitudinal data are needed of public opinion, protest and parties' reactions to them, preferably reported on the same ideological scale. The ResponsiveGov data provide such detailed information on protests and the reactions of the political elite to them.

The RepsoniveGov project collects data by manual coding of the content of a country's main newswire, legislative and parliamentary databases, surveys and newspaper editorials. First, coders select the relevant news articles to be coded with an extensive keyword search. Second, coders extract any relevant event taking place during a certain policy juncture from these newswires. Thus, all events reported within the publication relating to nuclear energy are covered by the dataset. All acts included in the data involve demands, claims, declarations, criticisms, or proposals related to the issue of nuclear energy. A wide range of different types of events, ranging from speeches, acts, parliamentary debates and court rulings to protest events and public opinion polls are coded. For example, in the case of nuclear energy after the Fukushima juncture, Mona Sahlin (*the actor*), leader of the Socialdemokraterna party in Sweden (*the organisation*), gave a speech (*the event*) on the 25.03.2011. She stated that nuclear energy should not be pictured as the only solution for Swedish energy needs, but instead green energy should be thought of as a viable alternative (*the position*). The ResponsiveGov data then provides a systematic coding of Mona Sahlin's statement, specifying a classification and date of the event, the actor, actor's organization and the actor's position. Consequently, coding is built upon a detailed codebook which is largely based on the procedures of claim coding (see, e.g.: Koopmans and Statham 1999; Helbling, Hoeglinger, and Wüest 2010).²

The ResponsiveGov data on the Fukushima accident provides data for the US, Belgium, Canada, France, Finland, Germany, Italy, Netherlands, Spain, Sweden, Switzerland and the United Kingdom. At the time of the Fukushima accident, all of these countries had either already used nuclear energy or governments had plans to phase it in again (Italy). The data collection on the Fukushima juncture starts on the day it occurred (03/11/2011) and ends two years later (03/31/2013). However, in case a government decided to phase-out nuclear energy (Germany, Italy³

²Reliability of coding is high with Krippendorff's Alpha being 0.88 for the major variables used in this paper. Reliability was judged by asking all coders to code the same sample of newswires. Precaution was taken to ensure that prior knowledge of the case was not effecting the reliability to scores. To ensure this all coders had to code the same sample of newswires in English for India.

³To be precise in the case of Italy the government withdrew from the plan to re-enter nuclear energy.

& Switzerland) *or* in case general elections took place a minimum of half a year after the Fukushima accident (France, Spain & Netherlands), these events mark the end of the coding period.⁴

I chose nuclear energy as the subject of the study since the issue was at the forefront of policy discussions throughout most of European countries after the Fukushima shock. Political parties, social movement organizations and the public in general got engaged in an extensive debate about the future of nuclear energy. Furthermore, the issue of nuclear energy is conflicted along party lines and an issue characterized by partisan conflict, ensuring that parties are outspoken on the matter and mostly outline clear-cut positions on the topic. Finally, parties' position on nuclear energy and how these are translated into policy are comparably simple to monitor for the public. In essence, parties either support or reject the usage of nuclear energy. Voters, thus, can easily tell if parties' policy-decisions align with their rhetorical promises (Bischof 2018). In contrast, some economic issues are less clear to monitor for the public. For instance, tax policies can be complex, full of jargon and technical. As a result the public might struggle to monitor if parties deliver on their promises. It becomes less clear and evident if parties truly fulfilled their rhetorical promises. Therefore, the issue of nuclear energy seems to be an excellent case to test if parties react to public demands. I will also discuss the generalizability of my findings to other issues in detail at the end of the paper.

4.1 Parties' rhetorical positions

To estimate how parties respond to public claims along the electoral cycle I construct a measure of "rhetorical position" for each party covered in the data set. The measure is based on statements made by politicians to the media (Interviews), press conferences, any kind of speech made during assemblies or party meetings, public letters which also include tweets, statement/speeches given during rally and

⁴Given that data collection ultimately ends once a government decides to phase-out nuclear energy, protest mobilization can hardly depend on these policy decisions undertaken by governments. This provides the advantage that protest mobilization is not endogenous to parties' policy decisions, but pictures protesters' dissatisfaction with the *status quo* of the policy.

campaign events, party resolutions and declarations, parliamentary questions and statements given during hearings (comparable to: Helbling and Tresch 2011). All these activities are assumed to aim at persuading the public, or to share information on a party’s position with citizens. I only included statements made by national-level politicians and the government.⁵ Thus, my research speaks to a growing literature on “rhetorical responsiveness” (see, e.g. Hobolt and Klemmensen 2008). Thereby I go beyond existing research on rhetorical responsiveness by not only measuring the salience/attention each party pays to the issue of nuclear energy, but also measuring the position of each statement contained in the measure.

To do so rhetorical events are ranged into two ideological categories: one outlining support for nuclear energy, the other one rejecting the usage of nuclear energy. In a first step I *counted* these pro- and anti-nuclear rhetorical statements per party and month.⁶ In a second step, all rhetorical activities were then summarized by party and months using the following formula:

$$Rhetorics_{it} = \log(\sum pro\ nuclear_{it} + 0.5) - \log(\sum anti\ nuclear_{it} + 0.5) \quad (1)$$

I subtracted the sum of “*anti nuclear*” rhetoric from the sum of “*pro nuclear*” rhetoric for each party per month.⁷ Thus, values greater than zero indicate rhetorical positions favoring nuclear energy, while values below zero indicate positions against the usage of nuclear energy.⁸ Just subtracting pro- and anti-nuclear talk results in a highly

⁵Even though this study is not interested in the sheer amount of news coverage per party, the selection of parties has to make sure that a substantial amount of media coverage is guaranteed across all parties. As a general rule parties that managed to secure at least five seats in the national parliament and at least 5% of the national vote share are included in the analysis (please consult the appendix for more details on party selection).

⁶*Ex ante* there is no reason to stick to a monthly measurement. One might as well think of a weekly or daily aggregation period. Yet, the smaller the time periods, the more parties will not talk at all about an issue. Thus, it is useful to find mid ranging time intervals which still ensure to cover party rhetorics in a detailed fashion without artificially increasing the zeros of the measurement.

⁷This means that zeros can have two meanings: Either the party did not talk about nuclear energy at all, or the party is completely divided regarding the nuclear issue. The latter case only occurs ten times out of 1094 possibilities. Running the upcoming regression analysis excluding these ten cases does not change the results substantially.

⁸Several parties remained silent on nuclear energy at different points of the analysis period. To estimate whether this was voluntary or whether the media chose not to report their positions, I run a logistic regression with the dependent variable being ‘1’ in case a party did talk about nuclear energy in a given month and ‘0’ otherwise. Following the previous discussion about party

skewed measurement, with values on the extremes being heavily overrepresented. This might substantially infringe the validity of the results reported in the next section. To address this issue, I use a log transformation to control for skewness – as shown in equation (1).⁹

4.2 Measuring the protrusion of protests

The information to measure *protrusion of protest* also come from the ResponsiveGov project. As discussed in the theoretical section, protests come in different size and shapes. The proposed measure matches the theoretical considerations about the protrusion of protest as outlined in the theoretical section. I created an index measuring protrusion of protest (protest index) for each country and month.¹⁰

First, the characteristics for each protest are recoded in *eight* binary variables reflecting the relevant characteristics of protest. The variables are: (1) more than 100 participants; (2) more than 1000 participants; (3) more than 10,000 participants; (4) duration of two or more days; (5) any organizational support; (6) illegal protest; (7) violent protest; (8) one or more participants wounded.¹¹ Second, the binary variables are aggregated for each protest event, with each event receiving a score ranging between 0 and 8. Next, I aggregated the protrusion of all protest events for each country and month. In case the ResponsiveGov data reported any form of counter-mobilization, these protests' protrusion was subtracted from the protest index.¹² In

size and incumbency affecting whether or not the media absorbs party claims, I included party size (vote-share and seat-share) and incumbency status as covariates (table 3 in the appendix). While more seats are a favorable and significant factor in gaining media attention, the effect size is comparably small with the probability of the media reporting the party position increasing by 1%. Neither vote share nor incumbency are significant factors for the media penetration. In summary, it appears that the selection criteria for parties ensure the comparability across parties and countries of the rhetorical position measurement and that the sample does not suffer from a substantial media bias towards larger and/or governing parties.

⁹ $\log(0)$ is undefined. Therefore I chose to introduce '0.5' into the equation – as other scholars did as well (e.g. Lowe et al. 2011). This ensures that in case a party did not talk at all is not undefined in the measurement but represents the middle of the scale with zero.

¹⁰Included are protests (including vigils), protest camps, any form of symbolic action, blockades and any form of occupation of land.

¹¹Using three binary variables to measure protest size, ensures that protest size is weighted higher than the remaining characteristics. This decision was made deliberately based on arguments about the pre-eminence of protest size (Lohmann 1993; DeNardo 1985).

¹²For instance, two protests in France supported the use of nuclear energy in an effort to secure jobs at a local nuclear power plant. Thus, they are defined as counter-mobilization, while the

case a party participated in a protest as an actor (e.g. giving a public speech), I excluded the protest event due to potential issues of endogeneity.¹³ However, the results reported in the following section are robust to the inclusion of all protest events, meaning that the effects reported in the following analysis do not depend on this decision. The protest index is right-skewed. Similar to previous research on protest, I logged the protest index to control for its right-skewness.¹⁴

The characteristics measured in the protest index have been carefully chosen according to the results of previous research on the successful impact of protest. While the inclusion of protest size, duration and organizational support (1-5) appear to be theoretically straightforward based on arguments found in previous contributions to the field of social movement studies (Walgrave and Vliegenthart 2012; Soule and Olzak 2004; Lohmann 1993; DeNardo 1985), the characteristics of illegality, violence and wounded participants deserve more attention (6-8).¹⁵ Since Gamson's studies (1990), scholars have repeatedly argued that the disruptiveness of protest increases protesters' chances of being heard and visible to the public, the media and party politics. Recent research on the effect of disruptiveness of protest on party agendas supports Gamson's theoretical arguments (McAdam and Su 2002). Wounded people not only signal a certain amount of commitment to the course of the protest, but more importantly focus the media's attention to the event. In case protesters are wounded during a protest in a democracy, questions tend to follow about how and why it happened. Examples of the media and parties' increased attention to a protest following the wounding of protesters are numerous, for instance, wounded protesters after the shooting of Michael Brown in Ferguson (US) on August 9, 2014 (Alcindor and Bello 2014) or protesters harmed by police monitors during the protest against the new railway station in Stuttgart (Germany) on September 30, 2010 (Marquart 2010). After considering these illustrative examples, it seems to be appropriate

remaining protests communicate an anti-nuclear position.

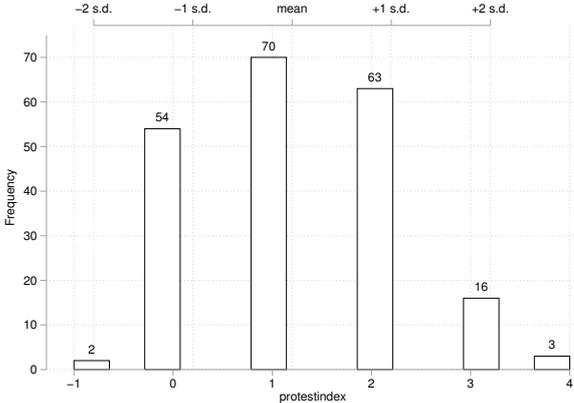
¹³Note, however, that the results do not change if these protests are included.

¹⁴To be precise I added 1 as a constant before logging the protest index (Gelman 2008).

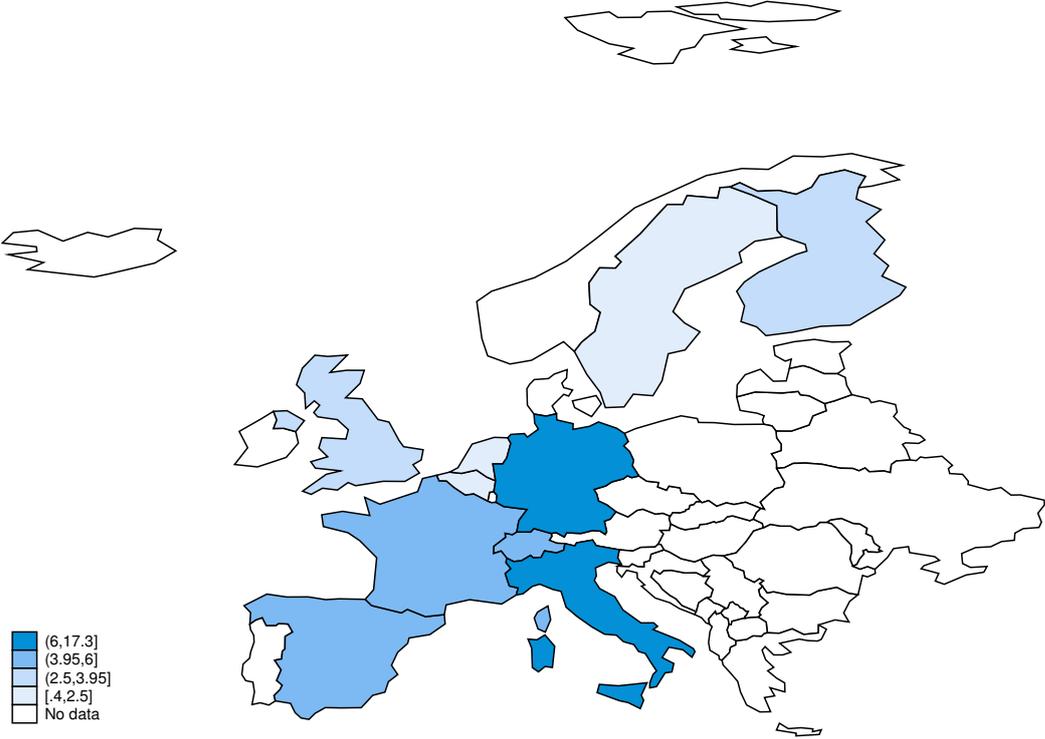
¹⁵Illegal protest are explicitly framed by the media as such (e.g. lacking a protest permit), occupations or blockades of land/buildings. If it is clear from the source that the protesters initiated the violence, a protest event is categorized as violent.

to include injuries of protesters as another characteristic that should lead protests to protrusively affect political parties' agendas. Finally I discuss the validity and reliability of the protest index on page 44 in the appendix.

Figure 1. Distribution of protest index



(a) Histogram of aggregated characteristics for each protest



(b) Average protest index per country

Source: Author's own.

Note: Figure (a) shows the distribution of characteristics for each protest coded within the ResponsiveGov project. Figure (b) reports the average protest index per country. Figure b) omits USA (=1.0) and Canada (=2.2) to ensure readability. protest index is split into quantiles.

Figure 1 reports the protest index resulting from this methodological decisions. As suggested earlier, most protests have low protrusion and a maximum of four out of the eight characteristics are fulfilled by three protest events. In summary, three quarters (74%) of all protest events coded in the ResponsiveGov data managed to obtain at least one of the eight characteristics of protrusion. Figure 1 also shows the average protest index for each country for the whole period of observation. The map underpins observations shared in previous studies, describing Germany and Italy as the countries that experienced the highest public pressure by demonstrations to phase-out nuclear energy (Jahn and Korolczuk 2012; Ramana 2013: 68-69). Germany faced some of the largest mobilization of protesters in its history with roughly 60.000 people protesting on 12 March and another 110.000 on 14 March 2011 and similar numbers took to the street in Italy. While France, Spain and Switzerland also experienced significant upheaval against the usage of nuclear energy, the remaining countries were frequently spared from large-scale protests. Yet, all countries included in the study faced some protest mobilization throughout the period studied.

The attentive reader might be concerned that in essence the proposed measure of protest is an indicator of public salience. Yet the proposed measure is only weakly correlated with salience of the nuclear issues.¹⁶ Similar to Lax and Phillips (2009) I estimated salience based on the number of newspaper articles published on the nuclear energy issue. Furthermore, introducing this measure in my regression analyses does not change the interpretation of the findings reported below. Also conceptually protest and salience are two distinct concepts, with protest frequently occurring on issues which are less prominent for the general public – as the nuclear energy issue studied here throughout most countries and time periods.

¹⁶A time series cross sectional analysis with the protestindex as a dependent variable and the number of newspaper articles as the main independent variable shows a .28 coefficient (p-value<0.001).

4.3 Modeling strategy, measuring campaign periods & remaining independent variables

Previous research has employed various measurements to estimate how politicians behave differently during campaign periods – including splitting datasets into first and second term periods in the case of studies on the American Presidency (Canes-Wrone and Shotts 2004; Rottinghaus 2008). Using dummy variables to mark the pre-electoral quarter has been the most common approach to measure campaigns (Canes-Wrone and Park 2012). I follow this approach by specifying a dummy variable which is ‘1’ for the three months before an election and ‘0’ otherwise. Yet, I also conduct robustness tests by expanding the measure until seven months before the election to show that campaign effects fade out along the electoral cycle. It is important to annotate that at the time of the Fukushima accident the countries included in the study were at the very different points in time of the electoral cycle, with countries facing an election in the next month (Finland), the next year (Spain) or in four years time (Sweden). Thus, the sample represents countries which faced very different electoral pressures at the time the accident occurred in Fukushima – also showing considerable variation in the amount of protest on nuclear energy and the public’s opinion on nuclear energy.

Public support is measured by using public opinion polls on the usage of nuclear energy, and also comes from the ResponsiveGov data. Question wording was chosen to be as similar as possible across countries. Question wordings inquire the support for the usage of nuclear energy within a country, as an example the global Gallup poll after the Fukushima accident asked: “Do you strongly favor, somewhat favor, somewhat oppose or strongly oppose the use of nuclear energy as one of the ways to provide electricity for the world?”¹⁷ Public support for nuclear energy is then measured by subtracting the percentage of respondents who disagree with the usage of nuclear energy (*somewhat oppose, strongly oppose*) from the percentage of respondents who

¹⁷The ResponsiveGov team coded all survey results reported in the newswires. Furthermore, coders had to search with a keyword list for surveys a) via Google and b) on webpages of public opinion institutes for each country.

favor it (*strongly favor, somewhat favor*). Thus, higher values on the public opinion scale indicate a more pro nuclear public mood.¹⁸

Several controls are included in the upcoming analysis. I control for *party ideology* by using the rile scale coming from the comparative manifesto data (Budge et al. 2001; Klingemann et al. 2006).¹⁹ The CMP data have been chosen over expert surveys, since the latter only include European countries and, thus, do not cover the whole sample of parties included in the upcoming analysis. Previous research shows that governmental parties and opposition parties might differ in their agenda-setting procedures, with opposition parties being freer in supporting advantageous and populist positions (Green-Pedersen and Mortensen 2010). Therefore, I use a dummy variable to control for *incumbent parties* which I assume to be more likely to support nuclear energy all else being equal. Comparable to previous studies, the number of respondents who name environmental issues as the *most important problem/issue* in each country is used to control for the salience of the issue of nuclear energy (Jennings and Wlezien 2011).²⁰ Political parties have mainly framed the usage of nuclear energy after the accident in Fukushima as an environmental issue. Thus, using the number of people naming the environment as the most important problem facing the nation should depict the salience of the nuclear issue for the public well.

To test my theoretical arguments, we need to examine if parties' responsiveness to public claims vary during campaign periods. Thus, I estimate a model in which the rhetorical position measurement is the dependent variable, the electoral cycle,

¹⁸A list of all surveys included for the following analysis is included in table 6 in the appendix. After publication, the author will also make the original survey data available in an online repository.

¹⁹While most studies used the rile score coming with the CMP data to estimate parties' left-right positions, I here rely upon Lowe et al.'s (2011) suggestions and use a logit scale to measure parties' ideological left-right placement. Parties' left-right placement runs from -2 to 1.4 with higher values indicating parties with a more right ideological position ($\mu=-.4$; $\sigma=.7$).

²⁰Data stem from the Eurobarometer for European countries; the Sorgenbarometer for Switzerland; Gallup for the US; and Focus Canada Report for Canada, and are measured on a yearly basis (with the exception of quarterly for the US). In contrast to the remaining covariates, this measure varies on a yearly level. Thus, I also replaced the measure with a monthly salience measure using the amount of total newswire pieces coded in the ResponsiveGov data comparable to what previous studies did as well (also see for a validation of the measure: Lax and Phillips 2012). The substantial interpretation of the results does not change if I use this measure instead.

the protestindex, public opinion and several controls are the independent variables:

$$\begin{aligned}
RP_{it} = & b_0 + b_1 Campaign\ Period_{it} \\
& + b_2 Protestindex_{it-1} + b_3 Protestindex_{it-1} \times Campaign\ Period_{it} \\
& + b_4 Public\ Opinion_{it-1} + b_5 Public\ Opinion_{it-1} \times Campaign\ Period_{it} \\
& + b_6 \zeta_{it} + \epsilon_{it}
\end{aligned} \tag{2}$$

With ζ being a vector of controls outlined above. The hypotheses derived in the theoretical section are translated into interaction terms, each indicating the respective moderation effect on the influence of public claims during campaign periods.

Since the data are time-series-cross-sectional – each party being observed over an average of 17.6 months – the Gauss Markov assumptions of standard OLS regression analysis are violated. Indeed, autocorrelation tests reveal that the null hypothesis of no serial correlation needs to be rejected.²¹ Further test-statistics show that the data are heteroscedastic and stationary.²² I run models with panel-corrected standard errors (PCSE) combined with a Prais-Winsten transformation to address the issues of heteroscedasticity, serial correlation within party_{*i*} and contemporaneous correlation (correlation of the errors of party_{*i*} and party_{*j*} at time *t*) respectively. I opted for these models specifications instead of a lagged dependent variable specification, since the latter tends to absorb a huge amount of the variation of the dependent variable (Achen 2000; Plümper, Troeger, and Manow 2005). However, the results of the models employed are robust to different sub-samples and estimation strategies – e.g. including a lagged dependent variable (Beck and Katz 1995); or using Driscoll-Kraay standard errors which tend to be more consistent for temporal invariant covariates

²¹To be precise a pooled Wooldridge test (Wooldridge 2013) is not significant and thus the null hypothesis of no autocorrelation cannot be rejected. Since H_0 tests for no autocorrelation, not rejecting H_0 does not entitle me to accept H_A . Using Wooldridge tests on a country by country basis discloses that H_0 needs to be rejected for several parties in several countries. Thus, I decided to proceed with caution and to control for a AR-1 autocorrelation structure. The standard errors of these models are also more conservative when compared to models not controlling for autocorrelation. Even though the *p*-values do not extensively differ from each other.

²²Breusch-Pagan and Cook-Weisberg tests for heteroscedasticity were employed and reject the null hypothesis of constant variance. Significant Unit-roots tests (Fisher-type test based on ADF test) reveal that the data are stationary.

(Driscoll and Kraay 1998). Furthermore, as unobserved heterogeneity potentially infringes the results, I include country fixed effects in my models. This also helps to address media bias towards reports on protest across countries. Finally, I decided to use a finite distributed lag model to estimate the effect of protest on party rhetoric (Wooldridge 2013: 146). Previous research stipulated divergent assumptions about the short-term and longterm effects of protest. Some studies suggested a direct translation of protest into policies (Walgrave and Vliegenthart 2012), while others used lagged terms (Giugni 2004). To get hold of such divergent assumptions, I decided to run a model including both, the protest-index at time t and at time $t - 1$. This way I simultaneously estimate the short-term and longterm effect of protest on party rhetoric. However, the results of the models employed are robust to different estimation strategies – e.g. including a lagged dependent variable (Beck and Katz 1995); different subsample estimations (see figure 1 and table 5 in the appendix). Furthermore, omitting the protest index at t would results in the same conclusions drawn from the analysis as reported in the appendix (see table D.6 in the appendix).

5 Results

Table 1 reports the results of the analysis. Column 1 is a baseline model containing all variables without any interactions. Column 2 to 4 add interactions between the protestindex, public opinion and the electoral cycle. Model 5 and 6 subsequently then add interactions between the protestindex at time t and its lagged version.

The campaign period variable holds a positive and significant coefficient in model 1. Thus, parties tend to have a more pro-nuclear rhetorical position during campaign periods. The effect of most controls correspond to the assumptions made earlier, as parties in government tend to talk more in favor of nuclear energy and green parties against it. The positive coefficient of the public support variable in model 1 suggests that all else being equal political parties are more likely to support the median voter, while they reject protesters claims – albeit this effect is only statistically significant for protest in the same month and not the previous month.

Table 1. The moderational effect of campaigns on public opinion & protest, regression results

	(1)	(2)	(3)	(4)	(5)	(6)
	baseline	public support	protest	pooled	public support × protest	public support × protest
protestindex _t	0.0474*** (0.014)	0.0299* (0.014)	0.0181 (0.015)	0.0145 (0.016)	0.0221 (0.018)	0.0912*** (0.019)
protestindex _{t-1}	0.00488 (0.012)	0.00930 (0.012)	0.000589 (0.012)	0.00214 (0.013)	0.008 (0.004)	0.00994 (0.013)
campaign period	0.149*** (0.035)	0.247*** (0.035)	-0.0611 (0.066)	0.0146 (0.054)	-0.0179 (0.066)	-0.0593 (0.080)
public support _{t-1}	0.0134** (0.004)	0.0119** (0.004)	0.0118** (0.004)	0.0104** (0.004)	0.00463 (0.005)	0.0100** (0.004)
mip _{t-1}	0.838 (0.556)	0.815 (0.523)	0.779 (0.507)	0.913 (0.529)	0.670 (0.648)	1.472** (0.518)
party ideology _t	0.108*** (0.024)	0.0989*** (0.024)	0.113*** (0.024)	0.108*** (0.024)	0.0848** (0.028)	0.100*** (0.025)
green party _t	-0.641*** (0.095)	-0.636*** (0.094)	-0.614*** (0.094)	-0.609*** (0.092)	-0.653*** (0.098)	-0.627*** (0.093)
incumbent party _t	0.431*** (0.025)	0.472*** (0.024)	0.490*** (0.024)	0.532*** (0.024)	0.438*** (0.044)	0.517*** (0.034)
campaign period × public support _{t-1}		0.193*** (0.037)		0.243*** (0.052)	0.114 (0.085)	-0.122 (0.085)
campaign period × protestindex _t			0.181*** (0.044)	0.100* (0.048)		0.319*** (0.060)
campaign period × protestindex _{t-1}			0.164* (0.065)	0.258*** (0.064)	0.484*** (0.084)	
protestindex _{t-1} × public support _{t-1}					0.00759 (0.004)	
campaign period × protestindex _{t-1} × public support _{t-1}					0.200** (0.069)	
protestindex _t × public support _{t-1}						0.0303*** (0.004)
campaign period × protestindex _t × public support _{t-1}						0.308*** (0.057)
Constant	0.0286 (0.041)	0.0263 (0.040)	0.0254 (0.040)	0.0153 (0.040)	0.0122 (0.042)	-0.00711 (0.039)
Observations	1086	1086	1086	1086	1086	1086

panel corrected standard errors in parentheses; country fixed effects omitted from table

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Column 2 suggests that parties become even more likely to react to the public at large during campaign periods. The positive coefficient for the interaction between campaign periods and public support is statistically significant. Also the slope and confidence interval in figure 2 underpin this finding. As theorized political parties become more inclined to support public grievances during campaign periods, while they are less likely to do so outside of campaign periods. Notice also, that in figure 2 the effect appears to be fairly similar for pro- (values above zero) and anti-nuclear public opinion (values below zero). The more pro-(anti-)nuclear public opinion is, the more likely are parties to represent the median voter position. Previous research based on manifesto data has concluded that parties respond to public opinion based on manifesto data (Spoon and Klüver 2015; Adams et al. 2006, 2004). However, my findings add nuance to these general findings. It appears that parties are significantly more likely to respond to the public during campaign periods than outside of campaigns. This means that most research on party representation based on manifesto data focuses on a time period when parties are most likely to respond to public opinion. In fact it might be the case that campaign periods could be the most likely scenario to find party responsiveness, while parties are significantly less likely to be respond to the median voter outside of campaign periods.

The third model reports the findings of an interaction between protest and the campaign period. It appears that as argued in the theoretical section political parties are responding differently to political protest during campaign periods. Yet, the findings are even more outspoken against the interests of protesters than theoretically assumed. The coefficient of the interaction between the protest index and the campaign dummy reported in model three is statistically significant and positive. Figure 3 reports the marginal effect of the interaction. It becomes evident that higher values on the protest index result in an ever stronger pro-nuclear position by political parties during campaigns. Thus, it appears that protest during campaigns lead to a backlash effect: parties become significantly more inclined to talk about issues salient during protest. Yet, at the same time parties reject protesters' claims,

Figure 2. Interaction public support

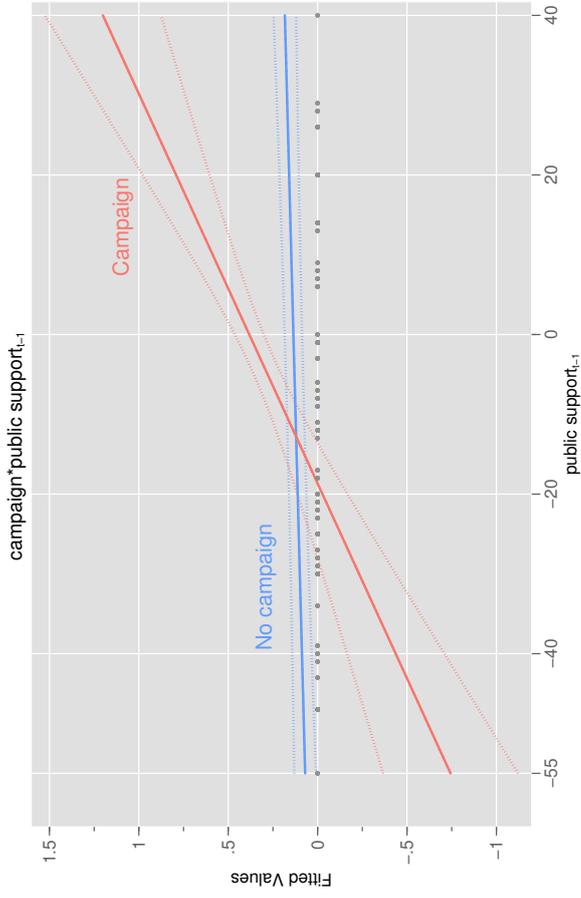


Figure 3. Interaction protest

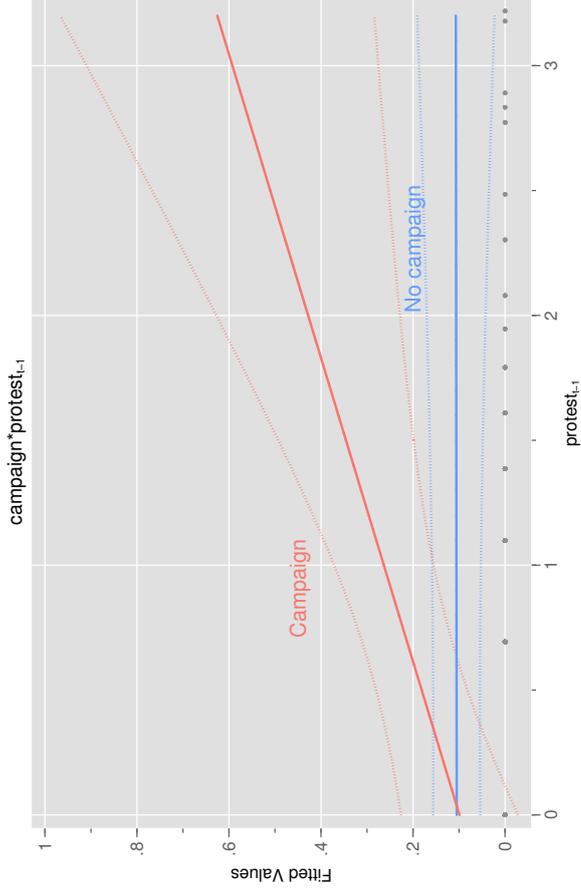


Figure 4. 3-way interaction

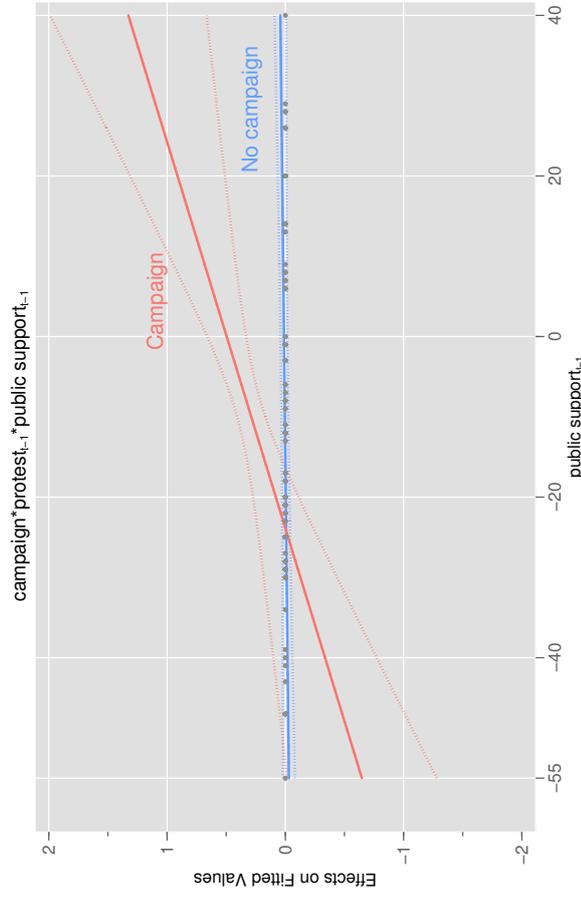
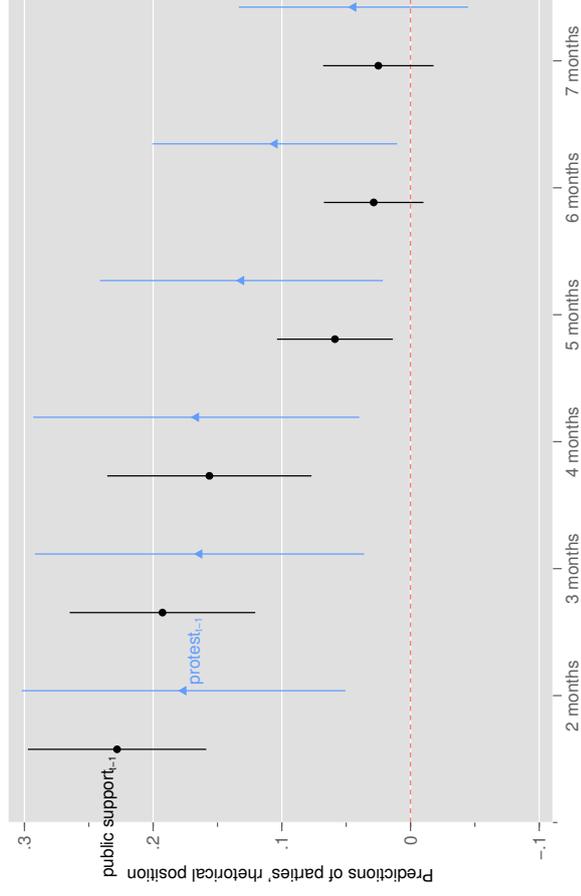


Figure 5. The decline of campaigning effects along the electoral cycle



Source: Author's own.

Note: Figures 2 - 4 report margins at means, all remaining variables kept at their means. Dotted lines report 95 % confidence intervals. Markers in figure 5 report coefficients from a regression model (similar to table 1). The whiskers report the 95 % confidence intervals of the estimates. All other variables included in the model are omitted from the figure.

potentially in an effort to secure the vote of the median voter.

To further analyze why parties' rhetorics are against protesters' claims during campaign periods, the last two models use a three way interaction between public support, protest and the campaign period dummy. This model tests the conditional protest hypothesis presented in the theory section. Figure 4 illustrates the significant effect between protest, public support and the campaign period dummy. It shows that parties are more likely to reject protesters' claims during campaign periods the more the median voter rejects protesters' interests. Only if the anti-nuclear majority is 18 or more percentage points larger than the pro-nuclear camp will political parties not speak-out against protesters as indicated by the confidence intervals overlapping with zero in figure 4. Thus, it appears that in line with hypothesis three how political parties react to protesters' claims in their campaign periods crucially depends on the public support for protesters' interests. If the public does not support protesters' claims, political parties appear to take no chances in supporting protesters, but instead support the will of the median voter. Yet, as shown in figure 4 support by the general public does not help protesters to move parties to support their claims. The confidence interval overlaps with zero for values smaller than -19 on the public support variable, indicating that there is at least not a statistically significant effect if protesters and the public align on an anti-nuclear stance.

Robustness I employed a range of robustness tests. First, I estimated models 2 and 3 in table 1 and re-specified the campaign dummy to include two or more months prior to election day to understand when the campaign period effect fades out. Shifting the length of the campaign period from two to seven months should address concerns that the three months length chosen in this manuscript and previous research appears to be *ad hoc* chosen. Figure 5 reports the coefficient of the interaction between varying campaign period dummies, the public support variable and the protestindex respectively. It becomes visible that the campaign effect constantly fades out across the 7 months prior to an election. Starting with the seventh months the effect is no longer significant on conventional statistical levels. Therefore, the results reported in

table 1 are consistent across different specification strategies of the campaign period, but seem to fade out in similar trends for the public support variable and the protest variable. Second, using models with lagged dependent variables also support the results reported here (table 3 in the appendix). Third, in their studies Lax and Phillips (2009) use the sum of newspaper articles published on a specific issue to measure the salience of a given issue. In contrast to naming the environment as the most important issue, it holds the advantage of specifically measuring the salience of the nuclear energy topic and not of a wider category which also covers nuclear energy. However, the findings remain robust to Lax and Phillips' (2009) approach. Using such a strategy instead of the most important issue variable used here, also supports the findings. Fourth, parties' rhetorical positions might be driven by a country's dependency on nuclear energy. Yet, controlling for a country's reliance on nuclear energy again sustains the findings (table 5 in the appendix).

A final critique is in order in relation to the fact that the Fukushima accident itself happened at different stages of the electoral cycle in each country. Thus, the question arises if the findings reported above are driven by the fact that the Fukushima accident coincided with electoral campaigns in some countries. To address this concern I introduced time fixed effects based on the temporal distance to the accident into the models reported in model 1. These time fixed effects control for a common time trend across countries. Meaning they control away the variation of the dependent variable stemming from the temporal distance to Fukushima accident (see table D.7 in the appendix on page 47). Notice, however, that the conclusions drawn from the analyses above remain similar. Parties remain more likely to respond to the median voter during campaign periods while ignoring protesters' claims in campaign periods.²³

²³Notice, that the interaction between the protest index and the campaign dummy is no longer statistically significant ($p=0.055$). Yet, both the size and direction of the coefficient remain similar. Also notice that the lack of statistical significance is more in line with the hypothesis outlined in the theory section above as it suggests that indeed parties simply ignore protesters during campaign periods.

6 Discussion of findings

Before concluding a discussion of the limitations of my study is in order. A first critical question concerns the generalizability of my findings. Are my findings peculiar to the issue of nuclear energy? On the one hand, nuclear energy could be regarded as a deviant case. In general the salience of the issue is comparably low and protesters' claims are rather one-sided (speaking out against the usage of nuclear energy). On the other hand, nuclear energy after the Fukushima accident can be understood as a hard case to test my arguments. First, the salience of the issue after the meltdown at Fukushima was high throughout most countries studied. As such the public was engaged in the policy debate shortly after the accident. Also the salience of the topic subsequently showed considerable variation across the countries studied here – much comparable to other issues (e.g. cultural issues, economic issues). Second, the claims brought forward during protest events are frequently one-sided. This also led most previous research to omit a measure of protesters' position in previous research (e.g. Giugni 2007; Agnone 2007; but see: Gillion 2012, 2013). Third, the nature of the nuclear energy debate is very transparent to voters. Voters can easily observe on which side of the policy debate parties stand (pro- vs. anti-nuclear) and judge if parties change their positions or deliver policies in line with their rhetorical positions (Bischof 2018). Thus, much like economic or moral issues the nuclear energy issue is obtrusive to the public during periods of high salience. Therefore, nuclear energy after the meltdown in Fukushima resymbolizes many characteristics which are typical to other issues as well.

Like many other empirical studies relying on time-series-cross-sectional data issues of endogeneity might linger. Yet for two reasons such concerns hardly apply to my analysis. First, it seems most likely that protesters do not react to each and every statement made by politicians but instead react to policy shifts. Since I omit countries from the analyses after such policy shifts occur, the protest events and protesters' behavior cannot be caused by policy shifts. Also the usage of interaction terms somewhat linger concerns of endogeneity. Specifically because how the Fukushima

accident and subsequent protesters mobilization fall into a country's electoral cycle is randomly assigned. Governments and parties did not control the occurrence of the Fukushima accident, the key conditioning variable studied in this manuscript. Second, the key theoretical puzzle aims to understand if parties represent public interests differently during campaign periods. The goal of this manuscript is not to disentangle if parties adapt their positions to the public. I show that parties respond differently during campaign periods. Further research is needed to understand if parties also adapt their position towards public claims differently during campaign periods.

7 Conclusion

This paper aimed to enhance our knowledge on the moderating effect of campaign periods on parties' responses to external stimuli – focusing on two key external stimuli, namely public opinion and protesters. In doing so it depicts a first step to augment political science knowledge on the relationship between campaign periods and parties' responses to popular claims in comparative perspective. Previous research has largely focused on the American case and rarely sought to understand the effect of campaigning on responsiveness of political parties to public claims in comparative perspective.

I theorized that parties' rhetorical reactions are contingent on an imminent election. Furthermore, I expected that parties' reactions differ for public opinion and protest. While parties should be more likely to be responsive to the median voter position in their campaigns in an effort to secure votes, they should largely ignore protesters' claims. This is so because protest is time and again the policy signal of societal minorities. Thus, representing such minority interest might constitute a risk for vote- and office-seeking parties.

The analysis of party rhetoric across twelve countries and two years support this claim: parties are more likely to react to the median voter during campaign periods than outside of them. Also in line with the theoretical framework, it appears that

protest results in a backlash effect during campaigns. Political parties talk about the issue at stake during protest, but their rhetorical reactions reject the interests of protesters. Further analysis suggests that in fact this is the case because parties are reluctant to represent protesters' claims if these are not supported by the median voter. Specifically if protesters' claims are at odds with the median voter position, are parties likely to speak out against protesters' claims. These findings are also robust across a set of robustness tests.

The results have important implications for theoretical arguments on party responsiveness as well as empirical studies on party democracies. From an empirical standpoint, this paper speaks to findings of previous work emphasizing the necessity to account for electoral cycle effects and particularly campaign periods when studying the dynamic relationship between parties and the public (Rottinghaus 2008; Canes-Wrone and Park 2012). As of today most research is concerned with theoretical arguments and data gathered during campaigns (e.g. party manifestos). As a result we still know little about how parties shape their preferences between campaigns (but see: Klüver and Sagarzazu 2015). However, my results suggest that much like American Presidents, political parties in Europe and North America seem to behave differently during campaign periods. More specifically campaign periods might make parties risk-averse. Parties seek then to maximize their electoral payoff by representing the median voter, while rejecting the interests of the mobilized masses. Thus, the results suggest that previous studies might have overemphasized the general responsiveness of political parties to public concern by specifically looking into electoral programs – a time period during which party responsiveness appears to be most likely. Our conclusions about party responsiveness might seriously depend on our focus on elections and measurements that cannot reveal the daily responses politicians give to public claims.

Yet, as suggested in the last section further research is needed to extend our knowledge of how parties' responsiveness might differ if elections are imminent. This paper relies on data about parties' rhetorical position on nuclear energy. Even though

the salience of the issue varies considerably across countries, different dynamics during campaigns might be found for different issues (Burstein 2014). Thus, future research should envisage to test if parties respond differently to the public across a larger set of issues. In this regard the strong effects found in the analysis on nuclear energy are telling and should be regarded as a first initiative to look into how parties respond to the public during campaign periods in comparative perspective on a larger sample of policy issues.

References

- Achen, Christopher H. 2000. "Why Lagged Dependent Variables Can Suppress the Explanatory Power of Other Independent Variables." Paper prepared for the Annual Meeting of the Political Methodology Section of the American Political Science Association, July 20-22: <https://www.princeton.edu/csdp/events/Achen121201/achen.pdf>.
- Adams, James, Andrea B. Haupt, and Heather Stoll. 2008. "What Moves Parties?: The Role of Public Opinion and Global Economic Conditions in Western Europe." *Comparative Political Studies* 42 (5): 611–639.
- Adams, James, Michael Clark, Lawrence Ezrow, and Garrett Glasgow. 2004. "Understanding Change and Stability in Party Ideologies: Do Parties Respond to Public Opinion or to Past Election Results?" *British Journal of Political Science* 34 (4): 589–610.
- Adams, James, Michael Clark, Lawrence Ezrow, and Garrett Glasgow. 2006. "Are Niche Parties Fundamentally Different from Mainstream Parties? The Causes and the Electoral Consequences of Western European Parties' Policy Shifts, 1976-1998." *American Journal of Political Science* 50 (3): 513–529.
- Agnone, Jon. 2007. "Amplifying Public Opinion: The Policy Impact of the U.S. Environmental Movement." *Social Forces* 85 (4): 1593–1620.

- Ahuja, Sunil. 1994. "Electoral Status and Representation in the United States Senate: Does Temporal Proximity to Election Matter?" *American Politics Research* 22 (1): 104–118.
- Alcindor, Yamiche, and Marisol Bello. 2014. "Police in Ferguson Ignite Debate about Military Tactics. <http://www.usatoday.com/story/news/nation/2014/08/14/ferguson-militarized-police/14064675/>." date accessed: 05/01/2015.
- Andersen, Robert, James Tilley, and Anthony F Heath. 2005. "Political Knowledge and Enlightened Preferences: Party Choice Through the Electoral Cycle." *British Journal of Political Science* 61 (1999): 285–302.
- Banducci, Susan A., and Jeffrey A. Karp. 2003. "How Elections Change the Way Citizens View the Political System: Campaigns, Media Effects and Electoral Outcomes in Comparative Perspective." *Political Science* 49 (1987): 443–467.
- Barnes, Samuel H., Max Kaase, Klaus R. Allerback, Barbara Farah, Felix Heunks, Ronald Inglehart, M. Kent Jennings, Hans-Dieter Klingemann, Allan Marsh, and Leopold Rosenmayr. 1979. *Political Action - Mass Participation in Five Western Democracies*. Beverly Hills: Sage Publications.
- Beck, Nathaniel, and Jonathan N. Katz. 1995. "What to Do (and Not to Do) with Time-Series Cross-Section Data." *American Political Science Review* 89 (3): 634–647.
- Bernstein, Robert A., Gerald C. Wright, and Michael B. Berkman. 1988. "Do U.S. Senators Moderate Strategically?" *American Political Science Review* 82 (1): 237–245.
- Bischof, Daniel. 2018. "Ideological Congruence between Party Rhetoric & Policy-Making." *West European Politics* 41 (2): 310—328.
- Budge, Ian, Hans-Dieter Klingemann, Andrea Volkens, Judith Bara, and Eric Tanenbaum. 2001. *Mapping Policy Preferences: Estimates for Parties, Electors, and Governments, 1945-1998*. Oxford: Oxford University Press.

- Burstein, Paul. 2014. *American Public Opinion, Advocacy, and Policy in Congress*. Cambridge, Massachusetts: Cambridge University Press.
- Canes-Wrone, Brandice, and Jee-Kwang Park. 2012. "Electoral Business Cycles in OECD Countries." *American Political Science Review* 106 (01): 103–122.
- Canes-Wrone, Brandice, and Kenneth W. Shotts. 2004. "The Conditional Nature of Presidential Responsiveness to Public Opinion." *American Journal of Political Science* 48 (4): 690–706.
- Cohen, Jeffrey E. 1999. *Presidential Responsiveness and Public Policy-making: The Public and the Policies that Presidents Choose*. Ann Arbor: University of Michigan Press.
- Dahl, Robert. 1971. *Polyarchy*. New Haven, CT: Yale University Press.
- Dalton, Russell, Alix Van Sickle, and Steven Weldon. 2009. "The Individual, Institutional Nexus of Protest Behaviour." *British Journal of Political Science* 40 (01): 51.
- Dalton, Russell J. 2008. "Citizenship Norms and the Expansion of Political Participation." *Political Studies* 56 (1): 76–98.
- DeNardo, James. 1985. *Power in Numbers*. Princeton: Princeton University Press.
- Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York: Harper and Row.
- Driscoll, John C., and Aart C. Kraay. 1998. "Consistent Covariance Matrix Estimation with Spatially Dependent Panel Data." *Review of Economics and Statistics* 80 (4): 549–560.
- Eisinger, Peter K. 1973. "The Conditions of Protest Behavior in American Cities." *American Political Science Review* 67 (1): 11–28.

- Elling, Richard C. 1982. "Ideological Change in the U. S. Senate: Time and Electoral Responsiveness." *Legislative Studies Quarterly* 7 (1): 75–92.
- Ferejohn, John A. 1986. "Incumbent Performance and Electoral Control." *Public Choice* 50 (1-3).
- Fernández-Vázquez, Pablo. 2016a. "The Credibility of Party Policy Rhetoric."
- Fernández-Vázquez, Pablo. 2016b. "The Credibility of Party Policy Rhetoric Survey Experimental Evidence."
- Gamson, William A. 1990. *The Strategy of Social Protest*. 2nd ed. Belmont: Wadsworth.
- Gelman, Andrew. 2008. "Scaling Regression Inputs by Dividing by Two Standard Deviations." *Statistics in Medicine* 27 (15): 2865–2873.
- Gelman, Andrew, and Gary King. 1993. "Why Are American Presidential Election Campaign Polls So Variable When Votes Are So Predictable?" *British Journal of Political Science* 23 (4): 409–451.
- Gillion, Daniel Q. 2012. "Protest and Congressional Behavior: Assessing Racial and Ethnic Minority Protests in the District." *Journal of Politics* 74 (04): 950–962.
- Gillion, Daniel Q. 2013. *The Political Power of Protest: Minority Activism and Shifts in Public Policy*. Cambridge, UK: Cambridge University Press.
- Giugni, Marco G. 2004. *Social Protest and Policy Change*. Oxford, UK: Rowman & Littlefield Publishers.
- Giugni, Marco G. 2007. "Useless Protest? A Time-Series Analysis of the Policy Outcomes of Ecology, Antinuclear, and Peace Movements in the United States, 1977-1995." *Mobilization: An International Quarterly* 12 (1): 53–77.
- Green-Pedersen, Christoffer, and Peter B. Mortensen. 2010. "Who Sets the Agenda and who Responds to it in the Danish parliament? A new Model of Issue Competition and Agenda-setting." *European Journal of Political Research* 49 (2): 257–281.

- Grose, Christian R., Neil Malhotra, and Robert P. Van Houweling. 2015. "Explaining Explanations: How Legislators Explain their Policy Positions and How Citizens React." *American Journal of Political Science* 59 (3): 724–743.
- Harris, Phil, Donna Fury, and Andrew Lock. 2006. "Do Political Parties and the Press Influence the Public Agenda? A Content Analysis of Press Coverage of the 2001 UK General Election." *Journal of Political Marketing* 5 (3): 1–28.
- Helbling, Marc, and Anke Tresch. 2011. "Measuring Party Positions and Issue Salience from Media Coverage: Discussing and Cross-Validating New Indicators." *Electoral Studies* 30 (1): 174–183.
- Helbling, Marc, Dominic Hoeglinger, and Bruno Wüest. 2010. "How Political Parties Frame European Integration." *European Journal of Political Research* 49 (4): 495–521.
- Hobolt, Sara B., and Robert Klemmensen. 2008. "Government Responsiveness and Political Competition in Comparative Perspective." *Comparative Political Studies* 41 (3): 309–337.
- Hopmann, David N., Christian Elmelund-Praestekaer, Eerik Albaek, Rens Vliegenthart, and Claes H. de Vreese. 2010. "Party Media Agenda-Setting: How Parties Influence Election News Coverage." *Party Politics* 18 (2): 173–191.
- Jahn, Detlef, and Sebastian Korolczuk. 2012. "German exceptionalism: the end of nuclear energy in Germany!" *Environmental Politics* 21 (1): 159–164.
- Jennings, Will, and Christopher Wlezien. 2011. "Distinguishing Between Most Important Problems and Issues?" *Public Opinion Quarterly* 75 (3): 545–555.
- Klingemann, Hans-Dieter, Andrea Volkens, Judith L. Bara, Ian Budge, and Michael D. McDonald. 2006. *Mapping Policy Preferences II - Estimates for Parties, Electors, and Governments in Eastern Europe, European Union, and OECD 1990-2003*. Oxford, UK: Oxford University Press.

- Klüver, Heike, and Iñaki Sagarzazu. 2015. "Setting the Agenda or Responding to Voters? Political Parties, Voters and Issue Attention." *West European Politics* pp. 1–19.
- Klüver, Heike, and Jae-Jae Spoon. 2016. "Who Responds? Voters, Parties and Issue Attention." *British Journal of Political Science* 46 (03): 633–654.
- Koopmans, Ruud, and Paul Statham. 1999. "Political Claims Analysis: Integrating Protest Event and Political Discourse Approaches." *Mobilization: An International Quarterly* 4 (1998): 203–221.
- Kuklinski, James H. 1978. "Representativeness and Elections: A Policy Analysis." *American Political Science Review* 72 (1): 165–177.
- Lax, Jeffrey R., and Justin H. Phillips. 2009. "Gay Rights in the States: Public Opinion and Policy Responsiveness." *American Political Science Review* 103 (03): 367.
- Lax, Jeffrey R., and Justin H. Phillips. 2012. "The Democratic Deficit in the States." *American Journal of Political Science* 56 (1): 148–166.
- Lodge, Milton, Marco R. Steenbergen, and Shawn Brau. 1995. "The Responsive Voter: Campaign Information and the Dynamics of Candidate Evaluation." *American Political Science Review* 89 (2): 309–326.
- Lohmann, Susanne. 1993. "A Signaling Model of Informative and Manipulative Political Action." *American Political Science Review* 87 (2): 319–333.
- Lowe, Will, Kenneth Benoit, Slava Mikhaylov, and Michael Laver. 2011. "Scaling Policy Preferences from Coded Political Texts." *Legislative Studies Quarterly* 36 (1): 123–155.
- Marquart, Maria. 2010. "Wasserwerfer-Opfer: Ein Video und viele neue Fragen, <http://www.spiegel.de/politik/deutschland/>

wasserwerfer-opfer-ein-video-und-viele-neue-fragen-a-721733.html.”

date accessed: 05/01/2015.

Mayhew, David. 1974. *Congress: The Electoral Connection*. New Haven: Yale University Press.

McAdam, Doug, and Yang Su. 2002. “The war at home: Antiwar protests and congressional voting, 1965 to 1973.” *American Sociological Review* 67 (5): 696–721.

Meyer, Thomas M., and Markus Wagner. 2016. “Issue Engagement in Election Campaigns The Impact of Electoral Incentives and Organizational Constraints.” *Political Science Research & Methods* 4 (3): 555–571.

Miller, Warren E., and Donald E. Stokes. 1963. “Constituency Influence in Congress.” *American Political Science Review* 57 (1): 45–56.

Nadeau, Richard, Neil Nevitte, Elisabeth Gidengil, and André Blais. 2008. “Election Campaigns as Information Campaigns: Who Learns What and Does it Matter?” *Political Communication* 25 (3): 229–248.

Ostrom, Elinor. 1998. “A behavioral approach to the rational choice theory of collective action: Presidential address, American Political Science Association, 1997.” *American Political Science Review* 92 (1): 1–22.

Page, Benjamin I., and Robert Y. Shapiro. 1983. “Effects of Public Opinion on Policy.” *American Political Science Review* 77 (1): 175–190.

Plümper, Thomas, Vera E. Troeger, and Philip Manow. 2005. “Panel Data Analysis in Comparative Politics: Linking Method to Theory.” *European Journal of Political Research* 44 (2): 327–354.

Powell, G. Bingham Jr. 2000. *Elections as Instruments of Democracy: Majoritarian and Proportional Visions*. Yale: Yale University Press.

Ramana, M. V. 2013. “Nuclear Policy Responses to Fukushima: Exit, Voice, and Loyalty.” *Bulletin of the Atomic Scientists* 69 (2): 66–76.

- Rottinghaus, Brandon. 2008. "Rethinking Presidential Responsiveness: The Public Presidency and Rhetorical Congruency, 1953-2001." *Journal of Politics* 68 (03): 720–732.
- Sagarzazu, Iñaki, and Heike Klüver. 2015. "Coalition Governments and Party Competition: Political Communication Strategies of Coalition Parties." *Political Science Research & Methods* pp. 1–17.
- Sartori, Giovanni. 1976. *Parties and Party Systems: A Framework for Analysis*. Cambridge, UK: Cambridge University Press.
- Soroka, Stuart N., and Christopher Wlezien. 2012. "Political Institutions and the Opinion-Policy Link." *West European Politics* 35 (6): 1407–1432.
- Soule, Sarah A., and Susan Olzak. 2004. "When Do Movements Matter? The Politics of Contingency and the Equal Rights Amendment." *American Sociological Review* 69 (4): 473–497.
- Spoon, Jae-Jae, and Heike Klüver. 2015. "Voter Polarisation and Party Responsiveness: Why Parties Emphasise Divided Issues, but Remain Silent on Unified Issues." *European Journal of Political Research* 54 (2): 343–362.
- Stimson, James A., Michael B. Mackuen, and Robert S. Erikson. 1995. "Dynamic Representation." *American Political Science Review* 89 (3): 543–565.
- Strøm, Kaare. 1990. "A Behavioral Theory of Competitive Political Parties." *American Journal of Political Science* 34 (2): 565–598.
- Thomas, Martin. 1985. "Election Proximity and Senatorial Roll Call Voting." *American Journal of Political Science* 29 (1): 96–111.
- Tucker, Joshua A. 2007. "Enough! Electoral Fraud, Collective Action Problems, and Post-Communist Colored Revolutions." *Perspectives on Politics* 5 (3): 535–551.
- Tufte, Edward. 1978. . *Political Control of the Economy*. Princeton: Princeton University Press.

- van Aelst, Peter, Bart Maddens, Jo Noppe, and Stefaan Fiers. 2008. "Politicians in the News: Media or Party Logic?" *European Journal of Communication* 23 (2): 193–210.
- Walgrave, Stefaan, and Rens Vliegenthart. 2012. "The Complex Agenda-Setting Power of Protest: Demonstrations, Media, Parliament, Government, and Legislation in Belgium, 1993-2000." *Mobilization: An International Quarterly* 17 (2): 129–156.
- Woldendorp, Jaap, Hans Keman, and Ian Budge. 2000. *Party Government in 48 Democracies. Composition - Duration - Personnel*. Dordrecht etc.: Kluwer Academic Publishers.
- Wooldridge, Jeffrey M. 2013. *Introductory Econometrics: A Modern Approach*. Mason, OH: South-Western.

Appendix: Does Timing Matter? Campaigning & Parties'

Rhetorical Reactions to Public Claims

A Re-coding actors' positions

All actor positions within the ResponsiveGov project are coded in relation to governments' initial policy positions. Government positions are coded on a pre-defined five point scale – ranging from 'very progressive' to 'very conservative'. Based on governments' manifestos, coalition agreements or policy documents prior to the Fukushima accident, whether they are favoring nuclear energy or whether they intend to phase-out nuclear energy at a certain point in time, they are then matched into the five point scale to assure comparisons between countries. Progressive positions thereby outline positions against nuclear energy and conservative positions outline positions in favor of nuclear energy.

Coders are then asked to place all actor positions during an event again on a five point scale, ranging from '*(-2) an actor's position is radically more progressive*' to '*(2) an actor's position is radically more conservative*' than the government's initial policy position – with '*(0) being the same position as the government's initial position*'. In the case of Fukushima, statements coded as progressive on the scale thereby are more against nuclear energy than the initial government position, while conservative statements picture more support for nuclear energy than the initial government position. Since this paper is interested in party positions, the original coding scale does not allow a party based comparison *across* countries due to varying initial government positions. Events outlining a more progressive position than the government might still be in favor of nuclear energy depending on the government's initial position in the country. Therefore, I recoded the scale according to the rules outlined in table A.1. For example in the case of Italy, the Berlusconi government's position was to re-enter nuclear energy and construct new nuclear plants – which was firstly coded as '*(2) very conservative*'. I then recoded any action by a politician which was classed between '-1' and '2' an activity supporting nuclear energy, while any action classified as '-2' into an activity rejecting the use of nuclear energy. By this procedure all policy positions are then coded as either supporting or rejecting nuclear energy.

Table A.1. Rules for recodes of rhetorics

Initial government position	statements' original classification	position after recode
-2 (Radically more progressive)	-2	Anti-nuclear
	-1	Anti-nuclear
	0	Anti-nuclear
	1	Anti-nuclear
	2	<i>Pro-nuclear</i>
-1 (slightly more progressive)	-2	Anti-nuclear
	-1	Anti-nuclear
	0	Anti-nuclear
	1	<i>Pro-nuclear</i>
	2	<i>Pro-nuclear</i>
1 (Slightly more conservative)	-2	Anti-nuclear
	-1	Anti-nuclear
	0	<i>Pro-nuclear</i>
	1	<i>Pro-nuclear</i>
	2	<i>Pro-nuclear</i>
2 (Radically more conservative)	-2	Anti-nuclear
	-1	<i>Pro-nuclear</i>
	0	<i>Pro-nuclear</i>
	1	<i>Pro-nuclear</i>
	2	<i>Pro-nuclear</i>

Source: Author's own.

B Party selection

Scholars show that party size and incumbency are favorable factors to obtain attention by the media (Hopmann et al. 2010; Harris, Fury, and Lock 2006). This factors can be summarized to reflect Sartori's (1976) ideas of party relevance. Even though this study is not interested in the sheer amount of news coverage per party, the selection of parties has to make sure that a substantial amount of media coverage is guaranteed across all parties. Otherwise the results might be systematically biased by parties' capabilities to penetrate the media agenda. Thus, parties included in this study have been selected to ensure that they fulfill Sartori's (1976) ideas of party relevance, as well as coalition and blackmailing potential.

As a general rule parties that managed to secure at least five seats in the national parliament and at least 5% of the national vote share are included in the analysis. Furthermore, parties needed to repeat this success at least once during the period of interest of the ResponsiveGov project (1980-2013). While these rules pertain to most parties included

in the following analysis, exceptions have been made in several occasions to guarantee to not ignore country particularities. Table 2 in the online appendix gives an overview of all included parties and reasons for their selection. I also included all governmental parties during their time being in government and parties which helped to stabilize a minority government. This results in 67 parties included in the following analysis (For an overview of all parties and more details, please see table 2 in the online appendix).

Furthermore, neither statements by parties' regional politicians, nor members of the European Parliament are included. Regional and supranational politics differ substantially from national politics. Therefore party members of regional or supranational branches often deviate from the national party line. Since this study is not interested in party factionalism between regional, national and supranational politics, these statements have been excluded from the analysis.

Table B.2. Parties included in this study

country	abbreviation	party name	Inclusion criteria			
			5 & 5	gov	gov supporter	right censored
Belgium	CD&V	Christen-Democratisch en Vlaams	x			
	cdH	Centre démocrate humaniste	x			
	Ecolo	Écologistes Confédérés pour l'Organisation de Luttes Originales	x			
	MR	Mouvement Réformateur	x			
	N-VA	Nieuw-Vlaamse Alliantie	x			
	PS	Parti Socialiste	x			
	SP.A	Socialistische Partij Anders	x			
	VB	Vlaams Belang	x			
	VLD Open	Vlaamse Liberalen en Democraten	x			
	Canada	BQ	Bloc Québécois	x		
CP		Conservative Party	x			
LP		Liberal Party	x			
NDP		New Democratic Party	x			
Finland	KD	Kristillisdemokraatit		x		
	KESK	Suomen Keskusta	x			
	KOK	Kansallinen Kokoomus	x			
	Ps	Perussuomalaiset				19.1% & 39 seats in 2011
	SDP	Suomen Sosialidemokraattinen Puolue	x			
	SFP	Suomen Ruotsalainen Kansanpuolue		x		
	VAS	Vasemmistoliitto	x			
	VIHR	Vihreä Liitto	x			
France	EELV	Europe Écologie-Les Verts	x			
	FN	Front National				system relevance
	MoDem	Mouvement démocrate	x			
	NC	Nouveau centre		x		
	PCF	Parti communiste française/ Front de gauche	x			
	PS	Parti Socialiste	x			

Continued on next page

Table B.2 – *Continued*

country	abbreviation	party name	Inclusion criteria			
			5 & 5	gov	gov supporter	right censored
	UMP	Union pour un mouvement populaire	x			
Germany	CDU/CSU	Christlich Demokratische Union/ Christlich-Soziale Union	x			
	FDP	Freie Demokratische Partei	x			
	Grüne	Die Grünen	x			
	Linke	Die Linke	x			
	SDP	Sozialdemokratische Partei Deutschlands	x			
Italy	LN	Lega Nord	x			
	PD	Partito Democratico	x			
	PDL	Il Popolo della Libertà	x			
	UdC	Unione di Centro	x			
Netherlands	CDA	Christen Democratisch Appèl	x			
	D'66	Democraten 66	x			
	GL	GroenLinks	x			
	PvDA	Partij van de Arbeid	x			
	PVV	Partij voor de Vrijheid	x			
	SP	Socialistische Partij	x			
	VVD	Volkspartij voor Vrijheid en Democratie	x			
Spain	CiU	Convergència i Unió	x			
	IU	Izquierda Unida	x			
	PP	Partido Popular	x			
	PSOE	Partido Socialista Obrero Español	x			
Sweden	C	Centerpartiet	x			
	FP	Folkpartiet liberalerna	x			
	Kd	Kristdemokraterna	x			
	MP	Miljöpartiet de Gröna	x			
	MSP	Moderata samlingspartiet	x			
	SAP	Socialdemokraterna	x			
	SD	Sverigedemokraterna				5.7% & 20 seats in 2011
	V	Vänsterpartiet	x			

Continued on next page

Table B.2 – *Continued*

country	abbreviation	party name	Inclusion criteria			
			5 & 5	gov	gov supporter	right censored
Switzerland	BDP	Bürgerlich-Demokratische Partei Schweiz		x		
	CVP	Christlichdemokratische Volkspartei	x			
	FDP	Freisinnig-Demokratische Partei der Schweiz	x			
	GPS	Grüne Partei der Schweiz	x			
	SVP	Schweizerische Volkspartei	x			
	SPS	Sozialdemokratische Partei der Schweiz	x			
United Kingdom	CON	Conservative and Unionist Party	x			
	LAB	Labour Party	x			
	LIB	Liberal Democrats	x			
United States	DEM	Democratic Party	x			
	REP	Republican Party	x			

Source: Author's own.

Note: A minority government supporter is thereby defined as: “*Party in Support of Government* are those parties that are not represented at the ministerial level but which at the same time support the investiture of that government” (Woldendorp, Keman, and Budge 2000: 15)

C Further analysis & robustness tests

Table C.3. Factors favoring party rhetorics on nuclear energy

	(1)
	1=Did party talk about nuclear energy in a given month
seat share	1.011*** (0.002)
vote share	0.986 (0.010)
government party	1.191 (0.167)
constant	0.322*** (0.039)
log likelihood	-681.849
<i>N</i>	1162

Exponentiated coefficients; Standard errors in parentheses
 * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table C.4. Dismantling the effects of protest characteristics

	(1)	(2)	(3)	(4)
	\sum rhetoric	\sum rhetoric	\sum rhetoric	\sum rhetoric
organization	0.147*** (0.031)			
illegal		0.0615 (0.063)		
violent			0 (.)	
wounded				1.247*** (0.172)
public support _{t-1}	0.139*** (0.031)	0.167*** (0.032)	0.174*** (0.031)	0.159*** (0.031)
mip _{t-1}	0.304 (0.328)	0.310 (0.325)	0.276 (0.321)	0.238 (0.319)
party ideology _t	-0.125 (0.177)	-0.0956 (0.177)	-0.0995 (0.177)	-0.102 (0.179)
green party _t	0.465 (0.296)	0.527 (0.295)	0.525 (0.295)	0.537 (0.300)
incumbent _t	0.501* (0.221)	0.499* (0.218)	0.493* (0.218)	0.529* (0.223)
constant	-0.798* (0.322)	-0.747* (0.318)	-0.718* (0.315)	-0.663* (0.315)
log. likelihood	-1201.53	-1210.65	-1211.12	-1194.21
<i>N</i>	1094	1094	1094	1094

Standard errors in parentheses;

all models negative binomial regression models;

all models use random effects on party level;

and country fixed effects;

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Note: Violence drops out of the equation due to country fixed effects and limited amount of observations (=10 protests only categorized as being violent).

D Robustness tests

Table D.5. Robustness: nuclear share & LDV

	nuclear share	nuclear share	LDV
rhetorical position _{t-1}			0.437*** (0.010)
protestindex _t	0.0354* (0.015)	0.0222 (0.017)	0.0103 (0.012)
protestindex _{t-1}	0.0118 (0.013)	0.00125 (0.013)	0.0121 (0.009)
public support _{t-1}	0.0222*** (0.006)	0.0184** (0.006)	0.0188** (0.007)
campaign period	0.263*** (0.037)	-0.0611 (0.067)	-0.0225 (0.043)
campaign period × public support _{t-1}	0.205*** (0.038)		
mip _{t-1}	1.229* (0.613)	1.086 (0.590)	0.209 (0.435)
party ideology _t	0.107*** (0.025)	0.115*** (0.025)	0.0409* (0.018)
green party _t	-0.622*** (0.095)	-0.610*** (0.096)	-0.234*** (0.062)
incumbent party _t	0.506*** (0.026)	0.496*** (0.027)	0.246*** (0.028)
nuclear share	-0.998* (0.468)	-0.676 (0.449)	
campaign period × protestindex _t		0.173*** (0.045)	0.0665 (0.038)
campaign period × protestindex _{t-1}		0.160* (0.066)	0.113* (0.054)
Constant	0.483* (0.213)	0.334 (0.205)	0.0834* (0.036)
Observations	1086	1086	1086

panel corrected standard errors in parentheses;
country fixed effects omitted from table

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table D.6. Robustness: without protestindex_t

	public support	protest	pooled
protestindex _{t-1}	0.00279 (0.009)	-0.00528 (0.009)	-0.00181 (0.007)
public support _{t-1}	0.00590 (0.003)	0.00485 (0.003)	0.00496 (0.003)
campaign period	0.202*** (0.030)	-0.0119 (0.049)	0.0242 (0.027)
mip _{t-1}	0.587 (0.449)	0.489 (0.417)	0.466 (0.375)
party ideology _t	0.0824*** (0.024)	0.0993*** (0.025)	0.0985*** (0.025)
green party _t	-0.680*** (0.095)	-0.674*** (0.097)	-0.636*** (0.093)
incumbent party _t	0.382*** (0.031)	0.335*** (0.033)	0.478*** (0.032)
campaign period × public support _{t-1}	0.141*** (0.029)		0.257*** (0.042)
campaign period × protestindex _{t-1}		0.223*** (0.052)	0.312*** (0.040)
Constant	0.0188 (0.035)	0.0179 (0.033)	0.0194 (0.034)
Observations	1086	1086	1086

panel corrected standard errors in parentheses; country fixed effects omitted from table

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table D.7. Robustness: time fixed effects models

	public support	protest
protestindex _t	0.0561* (0.022)	0.0620* (0.026)
protestindex _{t-1}	0.0174 (0.022)	0.0177 (0.025)
public support _{t-1}	0.00319 (0.007)	0.00375 (0.009)
campaign period	0.195*** (0.053)	-0.0868 (0.088)
mip _{t-1}	1.296 (1.029)	0.280 (1.098)
party ideology _t	0.0685* (0.027)	0.0689* (0.028)
green party _t	-0.658*** (0.101)	-0.651*** (0.103)
incumbent party _t	0.355*** (0.053)	0.350*** (0.053)
campaign period × public support _{t-1}	0.142** (0.048)	
campaign period × protestindex _t		0.124 (0.065)
campaign period × protestindex _{t-1}		0.137 (0.080)
Constant	0.0247 (0.077)	0.0621 (0.082)
Observations	1086	1086

panel corrected standard errors in parentheses; country & time fixed effects omitted from table

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

NOTE: After publication a full dataset containing the public opinion surveys used in this study will be published on the author's webpage.

Table D.8. Public opinion surveys included in this study

country	month	day	year	Institute	Survey ID
BE	4	15	2011	Gallup International	Global Barometer of Views on Nuclear Energy after Japan Earthquake
BE	6	25	2011	Ipsos-Mori Global @dvisor	Global Citizen Reaction to the Fukushima Nuclear Plant Disaster
BE	11	25	2011	Ipsos Public Affairs	Houding van Belgen ten opzichte van een kernuitstap
BE	12	1	2011	TNS Media	Peiling Kernenergie, December 2011
CA	4	1	2011	Abacus Data Inc	Canadian Public Opinion on Nuclear Power and other Methods of Power Generation
CA	4	19	2011	WINGallup International	Global opinion poll on nuclear energy after Fukushima
CA	6	15	2011	IPSOS Global Citizen	IPSOS Global @dvisor wave 20
CA	7	7	2011	Innovative Research Group, Inc.	National Nuclear Attitude Survey
CA	6	9	2012	Innovative Research Group, Inc.	National Nuclear Attitude Survey
FI	4	19	2011	Gallup International	Global Barometer of Views on Nuclear Energy after Japan Earthquake
FI	4	2	2012	TNS Gallup Finland	Mielipiteet ydinvoimasta
FI	12	10	2012	IRO Research	Suomalaisten Energia-asenteet 2012, Energiateollisuus ry., Marraskuu 2012
FR	3	21	2011	IFOP	Les francais et le nucleaire
FR	3	21	2011	TNS Sofres	Le nucleaire en France suite aux incidents au Japon
FR	4	5	2011	IFOP	Les Francais et la sortie du nucleaire
FR	4	13	2011	OpinionWay	The French, the cost of electricity and the nuclear energy
FR	4	20	2011	BVA Opinion / WinGallup	International opinion about nuclear
FR	6	5	2011	IFOP	Les Francais et le nucleaire
FR	6	19	2011	Viavoice	Six Francais sur dix veulent une sortie progressive du nucleaire
FR	7	8	2011	IFOP	Francais et Britanniques principaux soutiens europeens au nucleaire (sondage)
FR	11	13	2011	IFOP	The French and the nuclear
FR	3	9	2012	IFOP	Les Francais et le nucleaire
FR	3	26	2012	CSA	Les Francais et le nucleaire
DE	3	17	2011	Yougov	Yougov Umfrage Atompolitik

Continued on next page

Table D.8 – *Continued*

country	month	day	year	Institute	Survey ID
DE	3	16	2011	Forsa	Forsa Umfrage for Stern
DE	3	15	2011	Infratest-Dimap	ARD-DeutschlandTREND März 2011 extra “Atom-Katastrophe in Japan”
DE	4	1	2011	ZDF-Politbarometer	ZEITPUNKT FueR DEN ATOMAUSSTIEG IN DEUTSCHLAND
DE	4	7	2011	Yougov	70 Prozent gegen Atomstromimporte bei Ausstieg
DE	4	8	2011	GfK	Abkehr von Atomenergie findet breite Zustimmung
DE	4	19	2011	Emnid	Impact of Japan Earthquake on VIEWS ABOUT NUCLEAR ENERGY
DE	4	22	2011	Emnid	Umfrage: Kosten des Atomausstiegs verunsichern Buerger
DE	5	8	2011	Emnid	Umfrage: Deutsche weltweit besonders atomkritisch
DE	5	27	2011	Mannheimer Forschungsgruppe Wahlen	ZEITPUNKT FUER DEN ATOMAUSSTIEG IN DEUTSCHLAND
IT	3	15	2011	IPR Marketing	Il nucleare ed i cittadini (Nuclear and the citizens)
IT	3	15	2011	Fullresearch	Nucleare, italiani contrari al 68,4%
IT	3	15	2011	Istituto Piepoli	Gli italiani e il nucleare. L'effetto Fukushima
IT	3	15	2011	IPR Marketing	Il nucleare ed i cittadini (Nuclear and the citizens)
IT	3	18	2011	Panel Data	Gli italiani ed il nucleare
IT	3	19	2011	EMG	Sondaggio EMG: favorevoli o contrari al nucleare?
IT	3	18	2011	Panel Data	Gli italiani ed il nucleare
IT	3	22	2011	Osservatorio Giornalistico Mediawatch	Gli italiani su nucleare e rinnovabili nel dopo Fukushima
IT	3	22	2011	Gnresearch	Il pensiero degli italiani sul nucleare
IT	4	15	2011	WIN-Gallup International	Impact of Japan Earthquake on Views about Nuclear Energy
NL	4	19	2011	WIN-Gallup International	Global Snap Poll: Impact of Japan Earthquake on views about nuclear energy
NL	5	1	2011	TNS Opinion	Special Eurobarometer 75.1: Public Awareness and Acceptance of CO2 Capture and Storage
ES	3	20	2011	Metroscopia	Encuesta de Metroscopia para el El Pais 20/3/2012
ES	4	11	2011	Instituto de Opinion 2000	El Pulsometro de la SER
ES	4	15	2011	WIN-Gallup International	Impact of Japan Earthquake on VIEWS ABOUT NUCLEAR ENERGY
ES	4	21	2011	Red WIN/Gallup International/DYM	Encuesta de la Red WIN/Gallup International/DYM para ABC
ES	6	9	2011	CIS, Spain	Barometro Mayo 2011 Estudio 2888
ES	6	15	2011	Ipsos International	Global Citizen Reaction to the Fukushima Nuclear Plant Disaster. Ipsos Global @dvisor
ES	6	15	2011	Ipsos International	Global Citizen Reaction to the Fukushima Nuclear Plant Disaster. Ipsos Global @dvisor
ES	7	6	2011	Ipsos Public Affairs	Encuesta de IPSOS Public Affairs para Foro Nuclear

Continued on next page

Table D.8 – *Continued*

country	month	day	year	Institute	Survey ID
SW	3	19	2011	Sifo	Survey reported in Goteborgs-posten
SW	3	22	2011	Synovate	Survey reported in Dagens Nyheter
SW	6	8	2011	Novus	Rapport - Allm?nheten om k?rnkraft Maj 2011
SW	6	20	2011	IPSOS	Global Citizen Reaction to the Fukushima Nuclear Plant Disaster
SW	11	15	2011	Novus	Rapport - Allm?nheten om k?rnkraft November 2011
SW	4	28	2012	SOM-institutet	Opinions about energy and nuclear power - Research project Energy opinion in Sweden
SW	5	29	2012	Novus	Rapport - Allm?nheten om k?rnkraft Maj 2012
SW	11	9	2012	Novus	Rapport - Allm?nheten om k?rnkraft Oktober 2012
CH	3	20	2011	Isopublic	20 Minuten Online
CH	4	15	2011	ISOPUBLIC AG	20 Minuten Online
CH	4	27	2011	gfs Bern	SRG SSR Wahlbarometer
GB	3	22	2011	GfK NOP	UK nuclear support partially survives Japan crisis
GB	5	9	2011	Populus	British attitudes towards nuclear energy
GB	6	15	2011	IPSOS Global @dvisor	Global citizen reaction to the Fukushima nuclear plant disaster
GB	8	4	2011	IPSOS MORI	Public attitudes to the nuclear to the nuclear industry
GB	9	9	2011	Populus	British attitudes towards nuclear energy
GB	11	25	2011	BBC Globe Scan	Opposition to nuclear energy grows: Global poll
GB	1	12	2012	IPSOS MORI	Nuclear energy update poll
GB	2	12	2013	IPSOS MORI	Support for new nuclear energy slips as indecision mounts
US	4	8	2011	GfK Roper Public Affairs & Corporate Communications	The AP-GfK POLL March, 2011
US	4	15	2011	WIN-Gallup International	Impact of Japan Earthquake on Views about Nuclear Energy
US	6	15	2011	IPSOS Global @advisor	Global citizen reaction to the Fukushima nuclear plant disaster
US	11	25	2011	BBC Global Scan	Opposition to Nuclear Energy Grows: Global Poll

Table D.9. Summary statistics

Variable	Mean	Std. Dev.	Min.	Max.
rhetorical position	0.195	1.065	-4.86	4.533
protestindex	0.373	0.713	0	3.219
public support	-1.219	2.229	-5.5	4
mip	0.761	0.587	0.1	2.2
green party	0.099	0.298	0	1
incumbent	0.346	0.476	0	1
N		1094		