Collective Mobilization and Dynamic Representation

From Citizens to Policy and Back Again

by

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Budapest, 27 February 2019

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Signature

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Abstract

The question of whether collective mobilization makes a difference in policy is a puzzling one for social scientists, but also for citizens and activists. This dissertation focuses on the dynamics between collective mobilization and its consequences. On the one hand, it investigates whether mobilization influences policy outputs and agendas, and what role contextual factors such as public opinion and elite support play in this relationship. On the other hand, it inquires into reverse causality asking whether policy change affects mobilization in turn. The theoretical and empirical chapters in this dissertation approach this dynamic phenomenon from different angles.

Chapter 2 develops the conceptualization and measurement of collective mobilization as public claim making, and introduces the machine-coded protest event data (GDELT) used in the subsequent empirical analyses. Chapter 3 introduces a comprehensive typology of the consequences of mobilization, trying to put distinctions into a common framework. This typology is used for specifying the scope of the empirical analyses which are focused on analysing two specific types of consequences of mobilization: policy outputs and policy agendas. Next to that, this chapter also proposes a new dynamic model of representation, bringing together the impact of public claim making, public opinion, and elite support on policy outputs and agendas.

Within two issue areas, the environment and education, the dynamic model of representation was empirically tested using a large scale sample of 26 EU countries across a large time span (2002-2013). Chapter 4 looks into the effects of public claim making and its interactions with contextual factors on policy outputs in the form of public expenditure, while Chapter 5 focuses on consequences on policy agendas measured in two ways: governmental events in the media, and legislative activities. The results of both chapters suggest that mobilization does matter for policy. Large-scale increases in mobilization for issues generally correspond to large-scale shifts in policy outputs and agendas addressing those

issues. Nevertheless, this is not a simple process. Collective mobilization interacts with both public opinion and elite support for issues in opposite ways. While public opinion support appears to be a catalyser of this impact, elite support seems to reduce collective mobilization's effects.

Extending the empirical findings, Chapter 6 illuminates the differences in protest events and the wider array of public claim making events. It shows that while the difference between using a wider range of public claims compared to just protest events is not always critical, for issue areas where protest events are few, using only such events can underestimate the influence of mobilization on policy outputs.

Finally, Chapter 7 focuses on reverse causality in the relationship between mobilization and policy outputs. The effects of policy change and public opinion on intentions to engage in protest participation are analysed using experimental survey data. The results indicate that an unsupportive public opinion decreases mobilization, while policy change has a thermostatic effect as increased benefits lead to decreased mobilization intentions.

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Chapter 1

Introduction - An Agenda for Studying Collective Mobilization Consequences

1.1 From Mobilization to Policy and Back Again

In 2003, the local government of Basilicata region in Italy abandons plans to store nuclear waste near the small town of Scanzano Jonico after intense demonstrations in which citizens marched against the Law Decree and organized traffic blockades and occupations of the nearby railway stations. In 2014, the Hungarian Government drops plans of introducing an Internet usage tax following street demonstrations of tens of thousands. In 2015, the Romanian Prime-Minister resigns following protests around the country triggered by a nightclub fire incident. These are just a few examples in which collective mobilization made a significant difference. However, not always political action is met with similar success and it is not rarely that grievances are left un-responded to. The question of

whether mobilization makes a difference and, if yes, what are the other features of the political environment that come into play in the process is a puzzling one not only for the social scientist, but also for the common citizen and the activist.

Alongside traditional channels of political participation such as voting, social movements and protest activities in particular have long been regarded as important for expressing grievances and achieving goals in democracies. However, the question regarding collective mobilization's influence and consequences has been faced with a great deal of debate across social science disciplines (Klandermans, 2013). On the one hand, "political scientists have tended to view social movements as ineffectual, stressing instead the role of elections and public opinion as the main popular mechanisms mediating policy shifts" (McAdam and Su, 2002, p. 697). On the other hand, it has been "virtually a truism among sociologists that political parties, SMOs, and interest groups all affect policy" (Burstein and Linton, 2002, p. 383).

In what regards political science, previous research on the determinants of policy has concentrated on party politics and, specifically, on voting as the main vehicle for citizens expressing their grievances and being able to make a change. In this way, classic institutional factors such as the proportionality of the electoral system or the regime type have been in the spotlight of studies that aimed at explaining variation in how responsive politicians and policies are to the electorate (Powell, 2000; Bartels, 2008). Others have focused on public opinion, rather than the electorate, analysing the extent to which a state's policies are congruent with public opinion measured through proxies of public opinion simulated from demographic data, opinion polls, or other types of surveys (Weber et al, 1972; Erikson et al, 1994). However, these studies often overlook that in addition to these more institutionalized ways of affecting politics, there are other non-institutionalized channels through which citizens express their grievances and which might have an impact on policy and politicians' behaviour.

In what regards sociological research on collective mobilization, while political consequences and outcomes have been tackled by previous empirical studies for a long time, the progress made was often unsatisfactory (Amenta et al, 2010). Therefore, there has been a lopsided development with the literature leaning more into studying the determinants of mobilization, rather than its consequences on the outside world. In other words, in the sociological literature on collective mobilization, the question of why and how people mobilize has been more popular than the question of whether this makes a difference. When consequences are indeed analysed, the earlier literature often tended either to focus on single causal factors, engaging little with the broader context which could affect mobilization's impact, or to look only at particular cases of movements or countries. More recent political process approaches, such as the political opportunity structures (e.g. Kitschelt, 1986; Kriesi et al, 1992; Kriesi, 2007) and political mediation literatures (e.g. Cress and Snow, 2000; Soule and Olzak, 2004; Amenta, 2006), paid attention to this limitation regarding context and started to integrate different sociological and political traditions in the study of political representation. This literature argues that once people mobilize, political context (e.g. system of alliances that movements have, state openness, etc.) influences and structures their impact on policy (Amenta et al, 2010).

However, many of these studies are still limited in their empirical coverage in what regards the issue area under investigation, or the geographical and temporal scope of the analyses. This does not imply that studies which focus in-depth on specific cases of movements do not have their relative merits in conveying a detailed picture of the process through which impact is achieved. Nevertheless, a birds-eye view of how such impact looks on average across a larger time span, more countries, and more issue areas is warranted and relatively less encountered in the literature.

Additionally, one of the least addressed issues in the literature on collective mobilization's consequences is reverse causality. While studies usually deal with this by just lagging

participation/mobilization variables before the outcome under analysis, this does not completely address the reverse effects that policy change can have on mobilization itself and leaves us with several unanswered questions. What participation responses does policy change prompt from citizens? Once citizens attain their goals or once they acquire certain collective benefits, do they just stop participating? These are important questions since policies could produce positive reinforcement effects on mobilization or could halt the dynamics between the two through thermostatic effects in which people's involvement for an issue decreases after obtaining benefits related to it.

This dissertation attempts to focus on the dynamics between collective mobilization and its consequences, while taking into account these limitations in previous studies. By theorizing and examining the ways in which collective mobilization influences policies and politicians' behaviour, this dissertation aims to generate innovative contributions to the literature on collective mobilization and on political representation, theoretically, methodologically, and empirically.

Theoretically, in a similar fashion to political process approaches, the dissertation integrates the social movements and political parties literatures and, thus, sociological and political perspectives on collective mobilization and political representation, which have for a long time been disconnected (Hutter and Vliegenthart, 2018). It does this by looking at a more comprehensive model of the interactions between collective mobilization and its context in producing changes. The dissertation proposes a dynamic model of representation which involves collective mobilization, elite support for issues, and public opinion as its main elements, but also includes other contextual factors. The model is based on the idea that these three elements move meaningfully over time in terms of how they engage with issues, which makes policy shifts "respond" to them. This model is considered a dynamic one due to the fact that it is mainly focused on over-time moves and on interactions between these different channels of expressing or organizing grievances. In assessing the

model, the project also pays particular attention to the conceptualization of collective mobilization and its consequences. Therefore, the dissertation focuses on a conceptualization of collective mobilization as public claim making (Koopmans and Statham, 1999, 2010), which goes beyond demonstration-centric analyses and considers a wider array of action forms, initiated by a wide variety of civil society actors. The dissertation also introduces a more comprehensive typology of mobilization's consequences, before focusing empirically on two different types of such consequences: policy outputs (i.e. public expenditure) and policy agendas (i.e. governmental and legislative activities).

Additionally, the dissertation also aims to look into both sides of the coin regarding the relationship between collective mobilization and public outputs by analysing not only how citizens can "make" policies, but also how policies can "make" citizens. In doing so, the dissertation aims to convey a more in-depth picture of the dynamics between these elements and provides us with a better understanding not only on the immediate impact of mobilization, but also on political issue priorities and how certain issue areas become prioritized and become more salient or contentious than others, aspects important to the viability of liberal democracy, which suffers from citizen dissatisfaction with and disengagement from politics.

The studies included here are also methodologically innovative, as they use machine-coded data, relatively novel in the study of collective mobilization, to measure political activities in the issue areas environment and education across time and space. Additionally, these studies focus specifically on dynamic effects over time, rather than on static analyses. Empirically, they extend the scope of previous analyses by focusing on a large number of countries, 26 European democracies, over a large time-span, the 2002-2013 period, and across two different issue areas, environment and education. Additionally, integrating machine-coded data on public claim-making with other data sources (e.g. CPA data), the dissertation creates a harmonized, cross-national dataset measuring contention and policy

activities for the environment and education across a long-time period, that can be used in future research projects. Finally, in its study of reverse causality, the dissertation also generates original vignette experimental data on how policy change (together with other factors) influences mobilization.

The findings point to a dynamic phenomenon in which mobilization appears, indeed, not be in vain, though its impact and amount is shaped by the environment in which it takes place. The results for both the environmental issue area and the education issue area show that mobilization has positive effects in terms of both policy outputs and policy agendas. Nevertheless, the relationship between collective mobilization and outputs and agendas is not a simple one, as it is shaped by contextual factors in different ways. Collective mobilization interacts with both public opinion and elite support for issues, but in opposite directions. While public opinion support appears to be a catalyser of this impact, elite support seems to reduce collective mobilization's effects. Additionally, this phenomenon is also dynamic as it is characterized by reverse causality. Policy changes and public opinion significantly influence collective mobilization in their turn. An unsupportive public opinion decreases mobilization, while policy change has a thermostatic effect as increased benefits lead to decreased mobilization intentions.

1.2 Research Agenda

Taking into account the advantages and limitations of previous research on collective mobilizations' consequences, this section summarizes the research agenda behind the dissertation. While this agenda is partly modelled on a comprehensive review of the literature on movements' consequences by (Amenta et al, 2010), it does take into account more recent advancements in field. The theoretical and empirical chapters included in this dissertation attempt to tackle each of the issues on the forwarded agenda.

In their review of the literature on movements' consequences, Amenta et al (2010) show that while these have been in the attention of political scientists and sociologists alike for almost four decades, and with increasing interest in recent years, there is still much work to be done. On the one hand, there is a need for thoroughly addressing conceptualization and measurement problems, both in what regards identifying movements, and in what regards defining outcomes or consequences. On the other hand, there is also a need to extend the empirical scope of previous analyses. While many case studies of movements and their outcomes have been done providing an in-depth picture of how the phenomenon plays out in specific cases, there is also a need for obtaining a broader view of this process.

The few studies that attempt to provide such a broader view still suffer from several limitations that leave us with plenty of unanswered questions. Firstly, conceptualization and measurement has been often unsatisfactory which translated into poorly defined independent and dependent variables. Secondly, until recently scholars of policy change tended to emphasize a single causal factor and focus their efforts on theoretically and empirically testing their influence (Soule and Olzak, 2004). Thus, some analyses focused mostly on public opinion (e.g. Burstein, 1998), others looked mainly at the political climate (e.g. Jenkins and Perrow, 1977), while others only at collective action. Thirdly, there is an obvious US bias in the literature due to data availability on participation, public opinion, and public policy (Amenta et al, 2010). Finally, there is also a need for focusing on observing effects over time and taking into account reverse causality. As Soule and Olzak (2004, p. 474) argue, "few studies contain all of these key measures, and it is even rarer to find studies in which measures of electoral competition, public opinion, and political climate are observed over time or compared across some large number of relevant units with respect to some policy outcome".

Summing up, the general state of literature on the subject suggests a need for more systematization, for taking into account a larger number of factors, for enlarging the geo-

graphical scope of analysis, for a focus on observing effects over time, and for looking more closely into reverse causality. The agenda put forward here includes these aspects, which the dissertation sets to address.

1. Defining and identifying collective mobilization;
2. Defining and identifying consequences;
3. Taking into account a broader array of determinants of these consequences;
4. Extending the geographical and temporal scope of previous analyses;
5. Looking at effects over time;
6. Looking into reverse causality.

1.3 Scope Conditions and Case Selection

While the universe of cases taken into consideration for the scope of this dissertation consists of all countries that meet a minimum standard of democracy, the sample of countries included in these analyses is restricted to mostly 26 European democracies over the 2002-2013 period due to data availability (varying upon chapters depending on the data used). The countries included are: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Croatia, Hungary, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovenia, Slovakia, Spain, Sweden, and the UK. Data availability for these countries is good regarding measures of policy outputs and agendas, but also regarding the other factors included in the analysis (i.e. public opinion, elite support). Therefore, the time-series included here ranges from 2002 to 2013 and takes into account a wide array of characteristics of the countries over this period. This group of countries is homogeneous enough as all are consolidated

democracies with a relatively free media to allow studying trends in the relationship of interest in a similar manner. However, they are also heterogeneous in several theoretically relevant aspects (e.g. party system, wealth) which helps in studying variations across these factors.

This dissertation focuses on two methodologically advantageous issue areas, environment and education. Therefore, the choice for these two issue areas was guided, on the one hand, by its advantages in terms of measurement and data availability, and, on the other hand, by some of the similarities that these two issue areas share. Firstly, both of these issues are easily defined and tractable, which makes the task of identifying public claims, but also policy outputs and agendas for them easy. Secondly, not only legislative measures, but also policy outputs in the form of public expenditure are important for both of these issue areas and can be considered a collective benefit. This is in contrast to issues like abortion or gun control where legislative measures might be of higher importance and where policy outputs are harder to measure. Thirdly, these issues constantly experience a relatively high amount of public claim making across all countries in the sample and are often identified among the top value priorities of European opinion polls. This means that there are many observable instances of public claim making for the two that also vary throughout the years included in the sample. Last but not least, these issues also benefit from higher data availability not only in what regards public claim making and policy outputs and agendas, but also on public opinion and parliamentary party support, making it possible to extend the empirical scope of the analyses.

Despite these broad similarities, the two issue areas also differ especially in one respect. Educational issues are generally considered more salient in what regards public opinion and the policy agenda than environmental issues across many of the countries in the sample. This difference between the two allows assessing whether the dynamic model of representation introduced here functions in a similar way across issue areas sharing a wide range

of characteristics, but differing in salience.

The empirical analyses included here are also restricted to looking only at variations over time, while controlling for differences over space. The interest in the following empirical chapters will, therefore, fall not on explaining all (or more) of the variation in policy outputs and agendas across the countries in the sample, but rather on checking if any of that variation is significantly influenced by collective mobilization and other contextual characteristics that vary over time (public opinion, elite support, wealth, etc.). While this limits inferences on specific cross-country and cross-regional variations, it is methodologically advantageous in obtaining a birds-eye view of the consequences of collective mobilization over such a heterogeneous group of countries, while still looking at the time-variant effect of specific selected factors.

1.4 Plan of the Dissertation

Chapter 2 of the dissertation focuses on the conceptualization and measurement of collective mobilization. The chapter presents Protest Event Analysis (PEA) as a systematic way for measuring collective mobilization longitudinally and cross-nationally. It then introduces public claim making as a way for expanding the unit of analysis in PEA and, therefore, providing a better measurement of the level of contention in a certain issue area. The chapter finishes by introducing the machine-coded data used for measuring public claim making events and their characteristics (Global Dataset of Events, Language, and Tone).

Chapter 3 summarizes the previous literature on the consequences of mobilization and on the role that context plays in this process. The first part of the chapter aims to provide a more comprehensive typology of the consequences that collective mobilization can have. The typology involves demarcation of related terms such as success, impact, outcomes, or

outputs that are sometimes discussed under the umbrella term consequences. The second part of the chapter is dedicated to identifying several hypotheses and findings advanced in the literature on collective mobilization's consequences and to combine these in a dynamic model of representation centred on public claim making, public opinion, and elite support.

Chapters 4 and 5 are dedicated to testing this dynamic model of representation for two issues areas, the environment and education, across a large sample of EU countries and across a large time span. Chapter 4 looks into the effects of public claim making and its interactions with contextual factors on policy outputs in the form of public expenditure. Chapter 5 presents similar results, but focuses on consequences on policy agendas measured in two ways: governmental events in the media, and legislative activities.

Chapter 6 is dedicated to studying differences in protest events and the wider array of public claim making events. It, therefore, looks at whether using the wider public claim making repertoire or focusing on protest alone makes an empirical difference in terms of influencing policy outputs.

Finally, Chapter 7 focuses on reverse causality in the relationship between mobilization and policy outputs. It, therefore, inquires into the ways in which policy changes might prompt different participation responses from citizens. The effects of policy change (but also public opinion and issue area) on intentions to engage in protest participation are analysed using experimental survey data.

Chapter 2

Collective Mobilization as Public Claim Making

2.1 Introduction

The first of the challenges put forward for the field in the research agenda presented in the introduction is that of defining and identifying collective mobilization. This chapter tackles this challenge by expanding its conceptualization, operationalization, and measurement that will be used in the following empirical chapters. The first section of the chapter introduces previous ways of conceptualizing social movements and collective mobilization. This section also introduces Protest Event Analysis (PEA) as a systematic way for measuring collective mobilization longitudinally and cross-nationally. The second section addresses more specifically the issue of the unit of analysis used in PEA and, therefore, of the types of events used in gathering such data. In this respect, in line with the later generations of PEA studies, this dissertation also expands the unit of analysis from using only demonstration events to encompassing a larger category of public claim making events. The last

section of the chapter introduces the dataset used for measuring such public claims, the Global Dataset of Events, Language, and Tone (GDELT), which constitutes an automated attempt to identify and quantify the characteristics of public claim making events with a wide empirical coverage. The section expands on the advantages of using automated data, addresses its limitations, and introduces some ways in which to tackle and improve on these limitations.

2.2 Using Protest Event Analysis for Measuring Collective Mobilization

While most of the theoretical and empirical work refers to the consequences or outcomes of "social movements", these are rarely studied in the entirety of their manifestations. For example, one widely used definition of social movements is the one put forward by Tilly (1999) as "sustained challenges to power holders in the name of a population living under the jurisdiction of those power holders by means of repeated public displays of that populations' worthiness, unity, numbers, and commitment" (WUNC). This definition implies that social movements comprise only of those types of activities that are "sustained" and "repeated" making it hard to include here spontaneous forms of collective mobilization such as some of the demonstrations mentioned in the introduction. Therefore, while nominally referring to "social movements" (the blue circle in Figure 2.1), the literature often times focuses on collective mobilization and, more specifically, on events such as street demonstrations (the green circle in Figure 2.1) even if these are not repeated or sustained.

In order to better draw this distinction between the wider ways in which social movements manifest themselves and collective mobilization in particular, one could borrow the classification of challenges made by Snow and Soule (2010) in conceptualizing social movements. They argue that actions directed towards changing existing structures or systems

Table 2.1: Types of Challenges (adapted from Snow and Soule 2010)

Level of Action	**Direct Challenge**	**Indirect Challenge**
Individual Action	Type 1: Appeals to authority for personal adjustments (e.g. salary raise)	Type 2: Everyday forms of resistance and withdrawal (e.g. foot-dragging at work)
Collective Action and Social Movements	Type 3: Various forms of targeted protest	Type 4: Exiting from authority, other covert forms

of authority vary in their individual or collective character and in the types of challenges they make. Therefore, they first differentiate between individual action which is independent, and collective action which is joint or coordinated (or at least made in the name of a group). Secondly, they distinguish between direct and indirect challenges. Direct challenges represent "straight-forward, undisguised, overt appeals and demands, such that the targeted authorities are aware of both the claims and their carriers" (Snow and Soule, 2010, p. 12), whereas indirect challenges seek change by changing individuals or by more covert and ambiguous actions. When these dimensions are cross-classified, they gives rise to four types of challenges, as presented in Table 2.1.

According to this typology, social movements engage in collective action forms (Type 3 and Type 4), which can be both direct and indirect. However, indirect challenges (Type 4) are hard to identify and measure as these are more ambiguous and are often covert or happening behind closed doors. Because of these difficulties regarding the wider manifestations of social movements, studies often focus on collective mobilization as including challenges, appeals, or claims which are direct (Type 3) and also public. The choice of the unit of analysis in such studies has, therefore, often been protest events, even if these are sometimes not organized by a wider social movement. Protest events are defined by Rucht and Neidhardt (1998, p. 68) as a "collective, public action by a non-governmental actor who expresses criticism or dissent and articulates a societal or political demand". Such protest

events are not only the more visible and easily measurable manifestations of movements' activity, but they also allow capturing more spontaneous forms of collective mobilization (even if they are not repeated or sustained), which make them relevant in tackling the question of how citizens try to challenge or influence policy through alternative ways.

Furthermore, using these events is justified by the fact that one of the main claims in the literature on the consequences of movements is that these affect policy by signalling information to elites about problems in society. Protest events, movement organized or not, signal that (some) people are dissatisfied with a certain state of affairs, which might pose an electoral threat or bring an electoral gain. Therefore, politicians and political institutions tend to react to such incoming signals. Just like much of the literature on other types of political participation, this rests on assumptions embedded in the democratic theory of politics. This information assumption holds that social movements provide information necessary for election or re-election and, as such, politicians tend to listen to it (Burstein and Linton, 2002, p. 387). Starting from such an assumption, it has been claimed that activities matter more than organizational resources since these offer more information to politicians (Burstein and Linton, 2002). Therefore, working with protest events provides not only an easier way to identify movements through the activities that these perform (demonstrations, petitions, public statements, etc.), but their use in studies of movement consequences is also justified in light of this information assumption.

Protest event analysis (PEA) has been developed for systematically measuring the occurrence of protest usually by analysing the content of news sources using hand-coded, semi-automated, or automated techniques. Apart from allowing for an easy identification of movements' activities and for following this information signalling assumption, one of the main advantages of this approach is that it also allows for the quantification of protest and its characteristics (size, location, form, target, etc.). In this way, collective action can be more easily comparable across countries, across times, and across issues (Koopmans

and Rucht, 2002). Quantifying protest in a systematic fashion allowed a move beyond smaller-N research and illustrative case studies in social movements (Hutter, 2014), but also presented opportunities for linking this kind of data to other kinds of data related to the general political environment for studying the causes and consequences of collective mobilization (Koopmans and Rucht, 2002).

However, while providing a way for systematically measuring collective mobilization, PEA also comes with its own challenges. Firstly, since it often relies on news sources for identifying and measuring events, the choice of these sources is consequential and must be systematically thought of. Secondly, even if the news sources are well chosen, PEA data is inevitably biased in the way it represented protest since news outlets might report unevenly of events of different size and reflecting different issue areas. Thirdly, especially in its hand-coded forms, performing PEA is very resource intensive as it requires the processing of large amounts of textual information.

Looking at these challenges in previous protest event research, Hutter (2014) identifies four generations of PEA since its beginnings in the '60s and '70s. The first generation consisted of studies who tried to gather indicators for a large number of countries and for long-term processes (e.g. Russett et al, 1967; Taylor and Hudson, 1972; Tilly et al, 1975), but who paid little attention to the selectivity of their sources, to making their procedures well-documented and systematic, and to using fine-tuned indicators and categories of protest. The second generation focused on the emergence and development of social movements, paid more attention to categories and indicators, and started applying protest event analysis in cross-national designs (e.g. Jenkins and Perrow, 1977; McAdam, 1982; Tarrow, 1989). The third generation turned its attention to the selectivity of their news data and the biases this introduces in the analysis, but at the same time also started using more automatized techniques in selecting and coding events (e.g. Davenport, 2009; Earl et al, 2004; Ortiz et al, 2005). Finally, Hutter (2014) identifies the forth and most

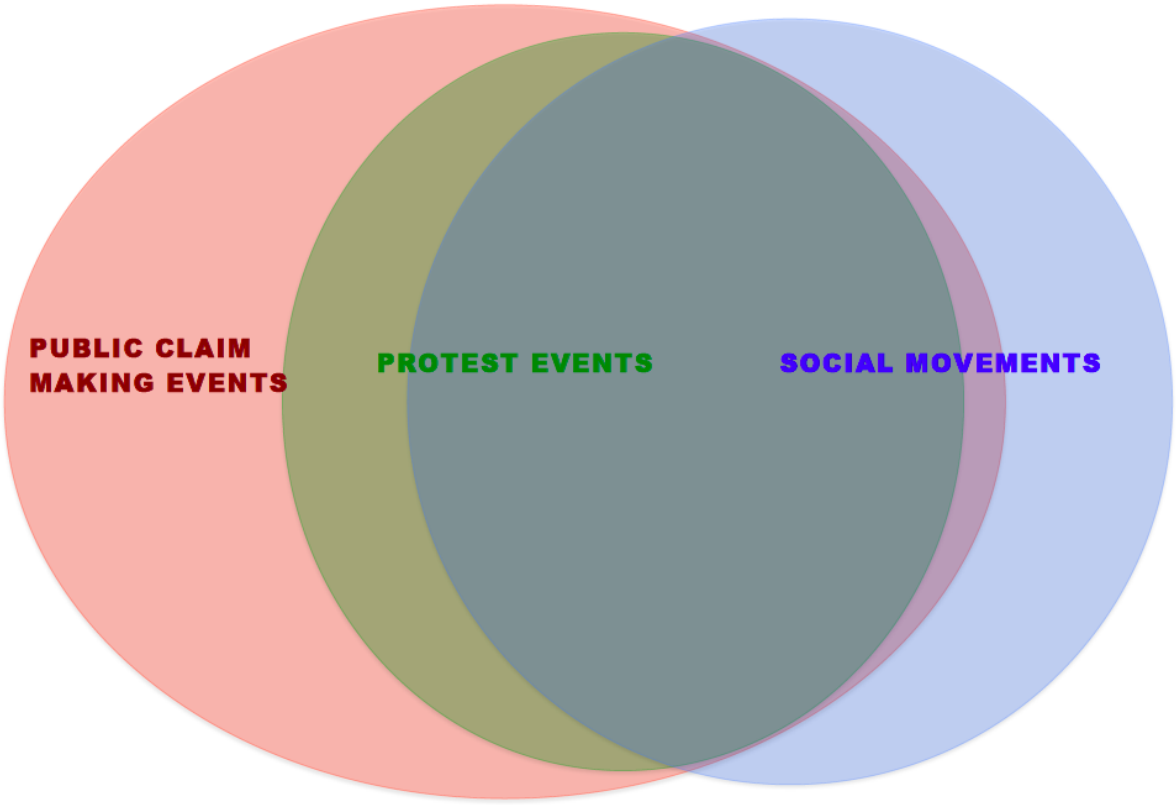
recent generation as being characterised by two different approaches. Some studies in this generation started focusing more on dynamic aspects within a single events (e.g. Tilly, 2008), while others tried to expand the coding unit for covering a larger group of events representing public claims, rather than just demonstrations (e.g. Koopmans and Statham, 1999, 2010; Kriesi et al, 2012). However, he argues that both approaches attempt to look at the relational aspect of political contention by using a "subject-relation-object" structure.

Following insights from previous research using PEA, this dissertation engages with the concerns of the third and fourth generations, while applying PEA to a broad set of countries, to a relatively long time-span, and to two different issue areas. Firstly, in line with the fourth generation, it also attempts to expand the coding unit from using just street demonstrations to a larger set of public claims. This is further described in the next section. Secondly, similar to the move towards using more automatic approaches to PEA started in the third generation, the dissertation also uses a PEA dataset that is automatically collected and, therefore, allowing for wide empirical coverage. The final section of the chapter is dedicated to expanding on the advantages and limitations of the GDELT dataset used in the following chapters, and to presenting some of the strategies used for mitigating these limitations.

2.3 The Unit of Analysis: Collective Mobilization as Public Claim Making

One of the challenges in doing PEA is the choice of the unit of analysis or, in other words, of selecting the types of events through which collective mobilization is identified. The caveat that, on the one hand, collective mobilization also includes spontaneous forms of participation which might not be repeated or sustained and, on the other hand, street demonstrations are not the only form through which movements manifest, is not often

Figure 2.1: Social Movements, Street Demonstrations, and Public Claim Making Events



made explicit. However, the fourth PEA generation started a move towards expanding the types of events included in the analyses. In this respect, while much of the early literature aims to inquire into how citizens influence politics through collective mobilization, the focus falls mostly on street demonstrations (green circle in Figure 2.1). However, there are other events such as petition drives, public statements, press releases, etc. which represent articulations of political demands in the public sphere and, therefore, channels through which citizens can influence politics. In this respect, Koopmans and Statham (1999) criticize the protest event analysis paradigm in the social movements field as being too demonstration-centric and limited strictly to street demonstrations as the key variable for analysing political change. They argue that if one is to take seriously the argument that "protest has become a routine and conventional action form in contemporary societies, it

is no longer self-evident that data which are limited strictly to protest events are good indicators for the level of contention" (Koopmans and Statham, 1999, p. 205).

Consequently, they argue for a need to move beyond a protest event design, which focuses only on street demonstrations, and incorporate more sophisticated and discursive forms of collective mobilization such as press releases or public statements through which actors might gain visibility for their claims on the public agenda. In this new framework, protest is considered as only one of the many tools in the toolkit of political contention and overall action repertoires in which both "physical protest" and "discursive protest" are taken into account are given due credit. In this new framework, the focus shifts from "protest" to "political claims making" and also the actors relevant to a particular issue field also shift from "movements" to "multi-organizational fields" (Koopmans, 2002). One of the more recent definitions of what public claims making and public claim analysis are can be also found in the *The Wiley-Blackwell Encyclopedia of Social and Political Movements* (Snow et al, 2013).

> *"Claims-making refers to the process of performing or articulating claims that bear on someone else's interests. In its simplest form an instance of claims making includes two actors a subject (claimant) and an object (addressee) and a verbal or physical action (demanding, protesting, criticizing, blaming etc.). In the context of social movement studies and contentious politics, claims-making has most often referred to the conscious articulation of political demands in the public sphere, thus leaving aside more private or hidden forms of political claims-making such as voting and lobbyism."* (Lindekilde, 2013)

All in all, following the idea of events as sending informative signals together with the above definition, this dissertation focuses on a conceptualization of collective mobilization as public claim making which refers to demand-making activities or events pertaining to a

certain issue area, which are initiated from civil society actors and are made public. This definition departs from the demonstration-centric paradigm in the literature by incorporating a larger action repertoire such as petition drives, public statements, press releases, etc., and by including claims coming from a variety of civil societal actors beyond movements, including individual citizens. Expanding both the action repertoire and the initiator actors provides a better measure of the level of contention surrounding issue areas, as well as allows me to capture a larger array of ways in which citizens try to influence politics outside of the electoral arena (Koopmans and Statham, 1999). This addresses the criticism of the social movement literature limiting itself to analysing street demonstrations, while neglecting other articulations of political demands in the public sphere and, therefore, channels through which citizens try to influence politics (Koopmans and Statham, 1999).

Accordingly, in the remainder of this dissertation, when referring to "social movements" or "collective mobilization", I will implicitly refer to public claims making events as their operationalization, while acknowledging that other characteristics of social movements which might not be related to such events can also be consequential. Therefore, while the blue circle representing social movements in Figure 2.1 refers to the concept that is most often used in the theoretical literature on consequences, the analyses presented here will focus on studying the red circle representing public claim making events. These are not only the more visible and easily measurable part of movements activities, but also include other forms of collective mobilization which might not be movement initiated (such as spontaneous protest forms) and also allow in expanding the unit of analysis of previous empirical studies beyond just street demonstrations (the green circle).

2.4 Using the GDELT for Measuring Public Claim Making

The data used for obtaining public claim making events related indicators is the Global Database of Events, Language, and Tone (GDELT) developed by Kalev H. Leetaru with the collaboration of Google, BBC, Jstor, and LexisNexis, among others. This dataset monitors hundreds of thousands of print, broadcast, and web news media in over 100 languages from across every country in the world. Among some of the news sources it includes are Agence France Presse, Associated Press, Xinhua, Google News, the New York Times, BBC monitoring, or the Washington Post (Leetaru and Schrodt, 2013). The database automatically codes daily events using the Tabari system together with open-source dictionaries and has arrived at covering over a quarter-billion event records in over 300 categories of action, covering the entire world from 1979 to present, and being updated every 15 minutes. The location and time of each event is recorded together with its type, disruption level, initiator and target actors, and media coverage.

The choice for using the GDELT was guided primarily by its incomparably larger coverage compared to other PEA datasets, which are usually limited to a very small number of years and countries. This makes it possible to empirically extend the scope of previous studies by exploring results across a relatively large time-span and across a large number of countries. Secondly, the GDELT contains 20 major classes of events with many subcategories of specific action forms coded using the CAMEO dictionary (see Table 2.2 for examples of events included). The inclusion of such a wide array of events and action forms makes the GDELT particularly suitable for analysing public claim making and extending the unit of analysis used in previous PEA to include more types of events than just street demonstrations. Thirdly, the GDELT also includes a wide array of initiator and target actors (governments, political opposition, police forces, legislative, multi-national corpora-

tions, non-governmental movements, non-governmental organizations, private individuals, etc.). This allows for carefully selecting the initiator and target actors of the events in Table 2.2 and follows the "subject-relation-object" logic of studies in the forth generation of PEA. Therefore, this makes the data suitable not only for measuring public claim making events initiated by non-governmental actors, but also for measuring agendas by looking at the levels of activity of governmental actors regarding specific issue areas (one of the agenda measures used in Chapter 5).

Despite these advantages, due to its machine coded production, the GDELT has been largely overlooked and underused in studies of collective mobilization. While its machine coding technique provides an amount of data that is nearly impossible to obtain through other means, it is also questioned for its accuracy (e.g. Hammond and Weidmann, 2014; Hanna, 2014). Nevertheless, there have been a number of tests comparing machine-coding techniques for PEA to human coding ones and indicating that the two provide results of similar quality, while pointing to the transparency and replicability advantages of the former (e.g. Beieler, 2016; King and Lowe, 2003; Schrodt and Gerner, 1994).

Despite initial concerns regarding representativeness, comparisons of GDELT with other events datasets have often pointed in its favour. The main concern regarding its representation of events in the media is related to the problem of false positives or to the fact that this data contains too much noise. It has been claimed that the GDELT might count as an event something that did not happen or report more than once about the same action (Ward et al, 2013). Nevertheless, there are several ways to clean the data for noise that can avoid this problem of false positives. One such way is counting only those events that are the main focus of a news item, rather than side-events (Claassen and Gibson, 2018). After using these cleaning techniques GDELT appears to be highly correlated with similar datasets such as the Dynamics of Collective Action database (Claassen and Gibson, 2018) or the Integrated Crisis Early Warning System database (Ward et al, 2013). In order to

Table 2.2: Event Categories Included in the GDELT

Category	**Action examples**
MAKE PUBLIC STATEMENT	e.g. make pessimistic comment, express accord;
APPEAL	e.g. appeal for economic cooperation, appeal for policy change, appeal to others to meet or negotiate;
EXPRESS INTENT TO COOPERATE	e.g. express intent to cooperate economically, express intent to settle dispute;
CONSULT	e.g. make a visit;
ENGAGE IN DIPLOMATIC COOPERATION	e.g. defend verbally, sign formal agreement;
ENGAGE IN MATERIAL COOPERATION	e.g. cooperate economically;
PROVIDE AID	e.g. provide economic aid, provide humanitarian aid;
YIELD	e.g. ease political dissent;
INVESTIGATE	e.g. investigate crime, corruption;
DEMAND	e.g. demand political reform, demand leadership change;
DISAPPROVE	e.g. criticize or denounce, rally opposition against;
REJECT	e.g. reject request or demand for political reform, refuse to ease popular dissent;
THREATEN	e.g. threaten to boycott, threaten political dissent;
PROTEST	e.g. demonstrate or rally for policy change, conduct hunger strike for leadership change, obstruct passage, etc.;
EXHIBIT MILITARY POSTURE	e.g. mobilize or increase police power;
REDUCE RELATIONS	e.g. halt negotiations;
COERCE	e.g. seize or damage property, use repression;
ASSAULT	e.g. abduct, hijack, take hostage, carry out suicide bombing;
FIGHT	e.g. occupy territory, fight with small arms and light weapons;
ENGAGE IN UNCONVENTIONAL MASS VIOLENCE	e.g. engage in mass killings;

Source: Conflict and Mediation Event Observations Event and Actor Codebook 1.1b3 2013

further increase the confidence in using the number of events as an indicator, the analyses included in the dissertation are limited to analysing variation and changes over time, while controlling for the differences between countries by means of fixed effects. In this way, it avoids problems of using the number of events as an indicator across countries that differ in their size and in the types of newspaper selection and coverage that they have (Hutter, 2014).

Lastly, despite its impressive amount of data, one additional problem with using the GDELT for studying collective mobilization is the inability to discern between the more fine-grained goals of public claim making events or between movement and counter-movement events. However, one can assume that a high number of events concerning a certain issue area are still to have an information effect by drawing attention to that issue area, independent of the more fine-grained distinctions in goals. Additionally, the response variables measuring policy outputs and agendas used in the following chapters also regard general actions taken in an issue area (overall spending for an issue area and overall attention given to an issue areas), rather than fine-grained policies, which goes in line with observing such information effects.

Taking into account these limitations, in order to increase the confidence in the usage of this dataset, the analyses presented here were preceded by several cleaning techniques and filtering steps. The event database for each country and each issue area separately was manually scanned and cleaned using several ways of filtering events. In a first step, a raw database of public claims is created by selecting specific types of events (demonstrations, petitions, public statements, etc.), their initiator (NGOs, citizens, etc.) and target actors (political parties, legislatures, companies, etc.) using a number of filters, as detailed below. These are selected to fit the definition of public claim making as a conscious articulation of political demands in the public sphere and, therefore, allow to go beyond demonstration-centric only analyses, while differentiating these from claims coming from governmental

or party actors. Additionally, only events which are the main focus of a news item were selected for avoiding noise and tackling the problem of false positives. In a second step, the selected events were aggregated by month, year, and by country, taking into consideration also other characteristics that they might have which where included in the dataset (how conflictual they were, their media coverage, the tone with which they were reported in the media).

Filtering wise, initially all public claims between 2002 and 2013[1] happening on the territory of each specific country and coded as related either to the environment or to education were selected. From these, only events that were mentioned in the lead paragraph of a news item were included in the analysis in order to tackle the problem of false positives. For building the public claim making data, in what regards the actors involved, in most cases, the target was the government or the local government, while the initiator actors were environmental NGOs such as Greenpeace or WWF. However, cases of events in which the target or the initiator actor were different were also included since the fact that they happen on the space of the country might still exert an impact on policy outputs.

As far as targets are concerned, both companies and different government bodies were included since events can have effects in the political arena irrespective of their target. For example, a big environmental demonstration targeting a company will be expected to also affect policy outputs and agendas through the informative signals that it sends to politicians. However, only targets related to bodies/institutions pertaining to that country were taken into consideration. Accordingly, events that were aiming at inter-governmental bodies or to the government of another country were ruled out. The assumption is that while indeed events that target actors from a different country might have spillover effects, only

[1]This time frame was chosen due to the data availability on other variables included in the subsequent empirical analyses.

events that target actors related to a particular country will really put political pressure on these actors to produce changes.

As far as the initiator actors are concerned, several types of initiator actors were included, such as NGOs, labour unions, or individual initiators. This dissertation is mainly aimed at analysing public claims initiated by civil society actors or citizens, but the dataset also included events such as public statements by politicians or governmental bodies. Accordingly, events initiated by government related bodies were left out, be these initiated by that country's government (e.g. Ministry of Environment) or by other countries' governments. However, opposition initiated events were taken into consideration as well.

In terms of the characteristics of the public claim making events included in the analysis, the first one used is the amount of claim making for a certain issue area. The indicator used for measuring this is the number of events in a certain year or month pertaining to a certain issue area (environment or education). Secondly, how conflictual events were was included and measured through the Goldstein scale, which is scale created for measuring the disruptive character of an event related to the category and subcategory that the event belongs to (Goldstein, 1992). This scale assigns to each event type a numeric score from -10 to +10, which specifies the level of cooperation or conflict to be conveyed typically by this type of event. For example a -10 event would be described as a clash or assault, while a 10 event would be described as extended material cooperation. This scale can be aggregated to yearly/monthly values by averaging.

Thirdly, in terms of media reporting of events, how popular a certain event was in the media was also measured through the total number of news items mentioning an event. This can provide a useful means of assessing the importance of an event since we can expect that the more discussion of that event in the media, the more likely it is to have an impact. If we just sum sources, a year/month with 9 minor events such as public declarations mentioned in only one news item would get the same score as a year/month with a major

event published across 9 news items. Thus, the choice for aggregation used here will be average as well, despite the fact that the scale is not a symmetric one as in the case of the previous two indicators.

Finally, how positively a certain event was reported by the media, which could also be interpreted as a proxy of how resonant with the public discourse the frames employed by a certain event were, was also taken into consideration. The indicator used for this was the average "tone" of all news items containing one or more mentions of an event. The range of scores assigned to the tone of events in the GDELT can vary from -100 (extremely negative reporting of an event) to +100 (extremely positive reporting). In what concerns aggregation, a simple average was again used for calculating the tone of events in a year/month. The descriptive statistics of the indicators in the public claim making event data constructed as detailed above are presented in the following empirical chapters analysing the data (Chapters 4, 5, and 6).

When using the GDELT as one of the measures of policy agendas in Chapter 5, namely governmental events reported in the media, the filtering of initiator and target actors was done differently. Governmental claims and events were selected as all those events initiated by a government related body (the executive, governing parties, coalitions partners, executive divisions, etc.) and aimed at another government related body and falling into a specific issue area (environment and education). This filtering included a wide range of events from ministries making public statements or attending cabinet meetings, to new regulations being announced. Of course, since the events included are only those reported in the media, the attention to a certain issue area might be higher than the one measured by the GDELT since many interactions between governmental bodies are not reported or can happen behind close doors. However, this proxy measure helps in conveying at least part of the agenda effect that public claim making might have and is supplemented by a measure of legislative activities obtained from the Comparative Agendas Project (for

Table 2.3: Public Claim Making - Conceptualization, Characteristics, Measurement

	Public Claim Making
Conceptualization:	Includes claim-making activities such as demonstrations, petitions, public statements, press releases that are publicly made for an issue and are initiated by social movements, civil society organizations, common citizens, spontaneous protesters, etc.. These exclude claims made by governmental actors and claims that do not happen in the public sphere.
Dimensions/ Characteristics:	The characteristics of claim making taken into account in these analyses are: 1. Amount: how many public claim making events; 2. Conflictualness: how conflictual these events are; 3. Media coverage: how popular events are in the media; 4. Media tone: how positively events are reported in the media;
Measurement:	1. Measured by aggregating the amount of claim making activities for an issue area that appears in the media in a certain period of time; 2. Measured by using the Goldstein scale which assigns a score of "conflictualness" to events according to their type; 3. Measured by aggregating the number of news items written about these events that appear in the media in a certain period of time; 4. Measured by aggregating the tone (positive-negative on a scale from -100 to +100) of the news items written about these events that appear in the media in a certain period of time;
Data Source:	*Global Dataset of Events, Language, and Tone*

details see Chapter 5).

Chapter 3

Consequences and Context

3.1 Introduction

This chapter is dedicated to tackling the second and third challenges of the research agenda put forward in the introduction. The literature on social movements or collective mobilization outcomes and consequences has been spread with a great deal of inconsistencies regarding the precise meaning and usage of these umbrella terms: "outcomes", "consequences", "success" etc. (Koole, 2013). Therefore, the first section of this chapter tackles the challenge of defining and categorizing the different kinds of consequences that collective mobilization can have. It introduces several conceptual clarifications and distinctions that will aid in specifying the scope of these analyses and placing them in the broader literature. Following the typology of consequences introduced in this section, the empirical analyses in Chapters 4 and 5 are focused more specifically on studying the impact of collective mobilization as public claim making on policy outputs in the form of public expenditure and on policy agendas in the form of legislative activities and governmental events reported the media.

The second section of the chapter engages with the third challenge of taking into account a broader array of determinants of these consequences. It is, therefore, dedicated to identifying several theoretical models of how these consequences come about and how the process is influenced by a host of contextual factors. Specifically, the section puts forward hypotheses on the relationship between collective mobilization, a variety of contextual factors, and policy outputs and agendas. The chapter concludes with a section that combines these hypotheses into a more comprehensive model of dynamic representation. This model is centred on the impact of collective mobilization on policy outputs and agendas, but involves the impact of public opinion and elite support together with the interactions they have with collective mobilization.

3.2 Conceptualizing Consequences

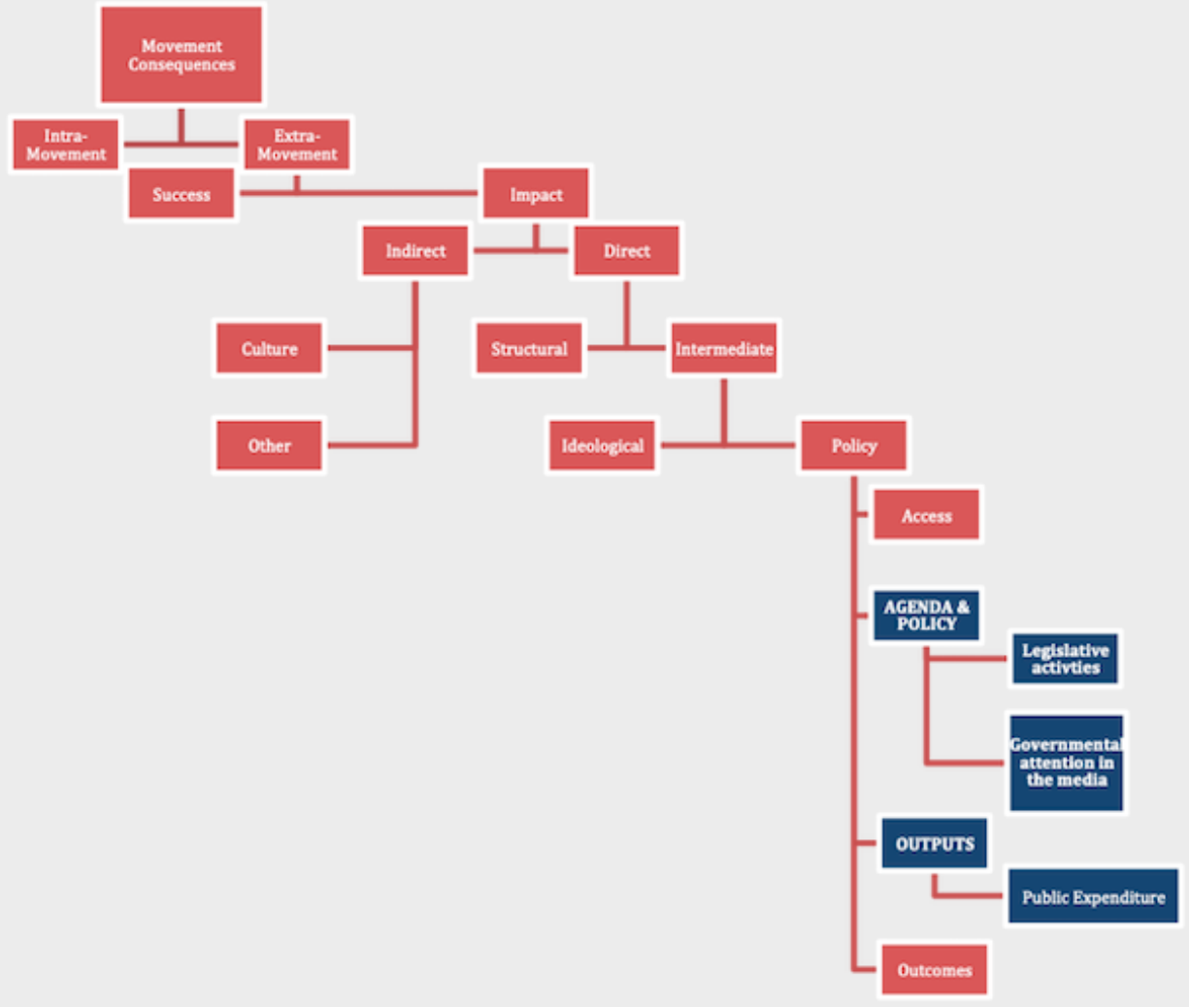
Several distinctions can be made within the concept of movements or collective mobilization consequences. Earl (2000), for example, distinguishes *intra-movement consequences* from *extra-movement consequences*. While the first refers to the consequences of movements on activists, movement organizations, and movement fields, the second refers to broader changes in culture, politics, or policies. Earl (2000) argues that the sociological literature on movements' consequences has been lopsided and has mostly focused on intra-movement consequences due to methodological difficulties in conceptualizing and operationalizing extra-movement ones. Recognizing this uneven development, this dissertation focuses specifically on extra-movement consequences and, therefore, does not inquire into the consequences of public claim making events on the initiators of these events themselves or on how movements are organized more generally (see Figure 3.1).

In terms of how consequences are defined at this extra-movement level, initially the literature referred to movements' *success* (Gamson, 1975) which relates the effects of movements

to the goals and ends of their participants. However, the concept of success has been criticized for being prohibitive since movements might only partially achieve what they propose or they can achieve advantages that were not stated as specific goals (Amenta and Young, 1999; Kolb, 2007). Thus, more recent literature has concentrated on the broader *impact* of social movements and focused more on general collective benefits (Amenta and Young, 1999; Amenta et al, 2010). Focusing on impact, rather than success, allows to include unintended consequences and to look at how movements might indirectly affect different elements of the broader political environment (impact on politics at large, spillover effects from one movement to the other, cultural effects, etc.) (Giugni and Passy, 1998; Meyer and Whittier, 1994). This dissertation also concentrates on studying the broader impact of public claim making, rather than just success, and looks specifically at impact in the political arena, rather than broader cultural (or other kind) of impact.

As far as impact and collective benefits are concerned, several distinctions in the literature can be again identified. For example, following Gamson (1975), Cress and Snow (2000) refer to direct outcomes and indirect outcomes. *Direct outcomes* refer to attaining new benefits or advantages such as higher spending, more rights, more legislation etc., but they can also include acceptance outcomes that happen when the target of the claim views movements more positively (rather than being hostile or indifferent) as a representative of a legitimate set of interests. *Indirect outcomes*, on the other hand, are outcomes such as broader and more subtle changes in the public perception of the issue under question, which are not articulated by the movements themselves. The distinction between direct and indirect outcomes could, at a first sight, mirror the distinction between success and impact, as success can only be a direct outcome since for a goal to be successfully attained it needs to be specifically articulated by the claimant in the first place. However, this does not mean that the broader impact category includes only indirect outcomes. Impact can therefore include both indirect outcomes such as more subtle acceptance from pub-

Figure 3.1: Typological Tree of Movements Consequences



lic opinion over time or generational effects, but also direct outcomes such as new policy benefits.

Amenta et al (2010) also argue that one can look at impact at several levels. First, one could look at the *structural level* at consequences such as obtaining democratic rights and practices or the formation of new parties. Secondly, one could also look at the *intermediate level*, which is mostly the level of policy. They argue that impact at both these levels could produce increasing returns of collective benefits, but that most collective action is actually aimed at the intermediate level. Since structural changes usually happen more slowly and are harder to study than intermediate changes, this dissertation will focus on the later and further differentiate between the scope of these intermediate changes.

Studies of political responsiveness to public opinion often distinguish between responsiveness in terms of politicians' ideological preferences and responsiveness in terms of public policy (Huber and Powell, 1994; Blais and Bodet, 2006). This distinction between *ideological consequences* and *policy consequences* is meaningful when it comes to movements' consequences as well since politicians' preferences are not the only determinant of public policies, for example. Public policies and agendas can also depend on unelected bureaucrats that can be independent from elected politicians and on state agencies that can have a high degree of autonomy.

Additionally, at this intermediate level of policy, we can also borrow Schumaker's (1975) five criteria of government responsiveness to movement demands: access, agenda, policy, output, and outcome/impact. *Access responsiveness* refers to the extent to which authorities are willing to hear the concerns of the movement. *Agenda responsiveness* refers to the situation in which the movement's claims are made into an issue and placed on the agenda of the political system. The third type of responsiveness, *policy responsiveness*, indicates the degree to which those in the political system adopt legislation or policy congruent with the demands of the movement. In Figure 3.1 agenda and policy impact are placed together

due to the difficulty to empirically disentangle how "deep" on the agenda an issue or claim has entered. A claim or issue can be simply mentioned in speeches or in questions and answers sessions in legislatures, legislation can be proposed for it, or legislation can be fully adopted.

Nevertheless, if the legislation is adopted and is fully enforced, output responsiveness is attained. Finally, what Schumaker (1975) calls impact responsiveness is obtained if the fully implemented policy alleviates the underlying grievance. While Schumaker's (1975) typology of responsiveness refers more to success regarding the manifest demands of a movement, this can also be adapted for looking at broader impact (not necessarily in line with clearly specified demands) in these five areas. Additionally, for impact responsiveness I use the concept of policy outcomes in order to avoid confusion with the entire scale of movements' impact. *Outputs*, therefore, refer to the actions that the government actually performs; they come first and are more tangible (could be seen as means) (Grumm, 1975). *Outcomes*, on the other hand, touch upon a policy's societal consequences after the policy has been implemented; they refer to the results that are caused by those outputs (could be seen as ends) (Grumm, 1975). The distinction between these two is meaningful since it can affect the time frame of the analysis, due to the different time spans of output changes (shorter time span) and outcomes change (longer time span).

Taking into account these distinctions, this dissertation focuses on extra-movements impact, and more specifically on intermediate level impact related to policy outputs (in Chapter 4) and agendas (in Chapter 5) (blue boxes in Figure 3.1). While studying structural impact and/or broader policy outcomes would allow looking at the consequences of collective mobilization on broad societal developments, using such measures is relatively unfeasible both due to measurement and data collection issues, and due to the more unpredictable time span of such effects. Policy outputs will be analysed by using government expenditure data in the two issue areas under consideration, environment and education.

Agenda-setting, on the other hand, will be studied by taking into account legislative activities such as questions, debates, and interpellations in legislatures, and governmental events reported in the media related these issues. The data used for each are further described in the respective empirical chapters (Chapters 4 and 5).

3.3 Placing Movements Consequences into the Larger Context

3.3.1 Collective Mobilization and Context

Besides basic democratic prerequisites such as the rule of law or societal outcomes, scholars in the field of democratic theory have long considered policy responsiveness as one of the key characteristics of representative democracy (Dahl, 1971; Lijphart, 1984). A close correspondence between politicians actions and policies and the preferences of the public is typically used by researchers to ask whether or not governments perform this responsiveness function. In what regards the determinants and extent of such responsiveness, political science research and sociological research have for a long time been split. On the one hand, the former has tended to concentrate mostly either on institutional features (electoral system proportionality, regime type, etc.) (Powell, 2000; Bartels, 2008) or on public opinion (Weber et al, 1972; Erikson et al, 1994; Stimson et al, 1995; Burstein, 2003) as the main features that guide politicians' behaviour and policy shifts. On the other hand, the later has tended to put a focus on contentious politics and collective mobilization in as such that it has been "virtually a truism among sociologists that political action affects policy" (Burstein and Linton, 2002).

Nevertheless, more recent political process approaches have started to integrate elements of these traditions in the study of political representation and to argue that once

people mobilize, political context influences and structures their impact on policy and politicians' behaviour (Amenta et al, 2010). The concept used in this literature is that of political opportunity structures and it often comprises of two aspects that appear consequential in the relationship between movements and their political environment (Giugni, 2004). The first aspect is related to the structure of the state and of political institutions, while the second refers to the system of alliances that movements can have. In what regards the system of alliances that movements can have, building on the political context approach, Amenta et al (1994) and Amenta and Poulsen (1996) propose a political mediation model arguing that successful mobilization benefits from mediation by either supportive or sympathetic actors in political institutions, or by public opinion.

Proceeding along similar lines, this dissertation also aims to integrate political and sociological traditions and look at a more inclusive model of representation in which both collective mobilization and contextual factors are given their fair share. In line with the political mediation model, the model proposed here considers both collective mobilization (as public claim making), and a supportive political context with a sympathetic public opinion and a supportive elite as important elements in guiding shifts in governmental and legislative actions. Additionally, building on the agenda-setting literature, the dissertation also focuses on issue attention as the main link between protest, parties, opinion, and policy (Hutter et al, 2010; Walgrave and Vliegenthart, 2012). These agenda-setting studies usually look at the impact of collective mobilization in terms of which issues also get emphasized by other political actors, in particular incumbent parties, as these have the resources to repress or make concessions to societal actors, especially since parties are involved in making policy (Vliegenthart et al, 2016; Bosi et al, 2016). Taking into account public claim making, parliamentary parties, and public opinion as the main elements of the model of dynamic representation, the thesis argues that these three elements move meaningfully over time in terms of how they engage with issues, which makes policy shifts "respond" to them. This

model is considered a dynamic one due to the fact that it is mainly focused on over-time moves and on interactions between these different channels of expressing or organizing grievances. In addition to these three main actors, there are other features of either public claim making (e.g. media coverage) and of the environment (e.g. country wealth) which can affect outputs and agendas and which are included in this model and in the following analyses as control variables.

The following section is dedicated to presenting previous theoretical models and empirical research on the impact of collective mobilization and of the contextual factors they take into account. After their introduction, each theoretical model is translated into working hypotheses, which are then used as a basis for a model of dynamic representation that focuses primarily on the impact of collective mobilization as public claim making (Figure 3.2). This model, with its afferent hypotheses is afterwards analysed empirically in Chapters 4, 5, and 6.

3.3.2 The Resource Mobilization Approach and the Information Model

While research on the determinants of mobilization and on the way in which movements operate follows a long tradition, research on impact had a relatively late start (Amenta et al, 2010). Due to this late start, initially most of the general hypotheses in the literature were based on the assumption that influence is produced by the same main determinants producing mobilization, among which organizational resources and tactics. Thus, one of the primary frameworks in the field is the resource mobilization approach that is based on the idea that the ability to mobilize different sorts of resources is key for the impact of movements, and mobilization of resources and membership does provide some political influence (Amenta et al, 2010, p. 296). For example,Gamson's 1975 foundational analy-

sis focuses predominantly on organizational characteristics, such as structure, goals, and tactics, to explain the success of movements.

Looking at research within the resource mobilization approach, Giugni (1998) identifies two main lines of investigation. The first line of inquiry focuses on organizational characteristics and asks whether stronger organized movements are more successful. For example, Tilly (1999) argues that protest movements can achieve political impact when they display what he calls "WUNC" (worthiness, unity, numbers and commitment). Basically, this means that the more people will show up and the more they are committed (and united), the larger is their chance that they will ultimately produce change.

The second line of inquiry focuses more specifically on the effects of disruptive and violent tactics and whether these are more successful than moderate tactics (Giugni, 1998). However, the results of this second line of research have been mostly contradictory. While some empirical work suggests that violence and the use of disruptive tactics is usually effective (e.g. Piven and Cloward, 1979; Gamson, 1990; Tarrow, 1994), other results point in the opposite direction. For example, research on strike activity found little evidence that unions might reach their goals more successfully through violence (Taft and Ross, 1969). Furthermore, studies on the urban riots of the 1960s in the US pointed out that these didn't lead to any improvements on part of the claimants (Kelly and Snyder, 1980).

Working in a similar tradition to the resource mobilization approach, others argue that any effect that movements have on lawmakers is as a result of the fact that they serve as a source of information to them who are puzzling over what their constituencies want (e.g. Lipsky, 1968; Gillion, 2013). Piven and Cloward (1979; 1984) contest Gamson's emphasis on the importance of organizational characteristics arguing that elites respond not to organizations, but to informative signals, such as disruption of significant social institutions. Similarly, recent work on the policy consequences of racial protest in the US by Gillion (2013) conceptualizes collective political events as providing a continuum

of information to elites on the problems of society. Each political behaviour is offered a saliency score according to the information it delivers to political officials by considering features such as its disruptive character, its size, or its duration.

In short, this information model argues that resources matter when these can make themselves noticed, in other words, they matter when they are converted into informative signals. This also stands at the basis of using Protest Event Analysis for measuring collective mobilization. The assumption under which this works is that the number, size, duration, mediatization, etc. of protest events is related to both the resources that a social movement can have and to the strength of the information signal they are sending. The empirical studies included here also take on board this assumption and use events in the media as a measure of this strength of information signal, while acknowledging the limitation that there might be other ways in which social movements can influence policy-makers (events that do not show up in the media, lobbying behind closed doors, etc.).

Therefore, in line with this information model, I hypothesizes that the more public claim making events there are in an issue area, the more policy outputs and agendas will be focused on that issue (net of contextual factors discussed below). Public claim making by civil society influences policy outputs through the awareness and attention they draw to a certain issue area. Accordingly, public claims influence the attention that governmental bodies or politicians give to a specific issue area, which might consequently prompt them to include that issue more and more on their agendas. However, since the effect that public claim making has is an informational one, I also argue that the length or the time-span of the signals sent though collective mobilization matters. Signals sent over the long-term (yearly) being more effective than short-term (monthly) signals about public preferences. This is because long-term public claim making functions as a display of commitment and sends a stronger and more stable signal about public preferences than short-term public claim making, which could be interpreted as being more volatile.

(H1): The higher the amount of public claim making events in a certain issue area, the more policy outputs and agendas are focused on that certain issue area.

(H2): Long-term public claim making for an issue is more effective than short-term public claim making.

Additionally, it can also be argued that certain public claims could go unnoticed if they dont have proper media coverage. In line with this information assumption, media coverage could be one of the consequential characteristics of events and it is not far-fetched to wonder whether it can make or break their impact. Therefore, a second hypothesis included in these studies is that higher media coverage of public claims sends a stronger information signal and therefore has an influence on policy outputs and agendas.

(H3): The higher the media coverage of public claim making events in a certain issue area, the more policy outputs and agendas are focused on that certain issue area.

In line with the research on the effects of disruptive and violent tactics, I also hypothesize that the conflictual nature of the tactics used by movements or of the public claims has an effect on outputs and agendas. However, I leave the direction of this effect unspecified since the literature has been divided on this.

(H4): The conflictual nature of public claim making in a certain issue area has an effect on policy outputs and agendas in that issue area.

Last but not least, scholars have also emphasized the importance of framing for movements' impact. Cress and Snow (2000) argue that for a challenger to have a policy impact

it must employ resonant frames of the problems in society. In other words, it has to identify credible problems and pose credible solutions to them. A version of the framing model is tested here using the tone with which public claim making activities are reported in the media. I argue that media tone could be an adequate proxy for framing since if the frames proposed by those who participate are minimally plausible and culturally resonant the media tone should be more positive than when the frame is not. While particular media sources could be biased, the GDELT data used here (see Section 2.4) is based on multiple such sources for measuring events, which I expect to partially mitigate this problem.

(H5): The more positive the tone with which public claim making events in a certain issue area are covered by the media, the more policy outputs and agendas are focused on that certain issue area.

3.3.3 The Political Opportunities and Context Model

The mixed results of studies focusing solely on collective mobilization have prompted other works to shift focus towards the environmental conditions that might affect its consequences and to start investigating other features of the political context that might facilitate movements' impact (Giugni, 1998; Kitschelt, 1986; Kriesi et al, 1992; Kriesi and Wisler, 1996; Kriesi, 2007). Taking such a political process approach to the consequences of movements, Tilly (1999), for example, draws attention to the possibility that the change that movements produce might ultimately not depend only on movement-controlled characteristics. He, thus, states that "no social movement is self-contained", but it operates with the involvement of at least three distinguishable populations: power holders who are the objects of claims, participants, and a subject population on whose behalf participants are making or supporting claims (Tilly, 1999, p. 257).

This political process approach argues that once people mobilize, their impact is influ-

enced by the political context in which they operate (Amenta et al, 2010). One concept used in the literature is that of political opportunity structures and it usually comprises of two aspects that appear to be important in the relationship between movements and their political environment (Giugni, 2004). The first aspect is related to the structure of the state and of political institutions, while the second refers to the system of alliances that movements can have. In this section, I focus on the first aspect which is related mainly to broad country characteristics. The second aspect will be discussed in the following two sub-sections and is identified by two separate models: the political mediation model, and the public opinion model.

In what regards the influence of the structure of the state in aiding or hindering collective mobilization, most of the analyses use measures of the general openness of the political system or of the access to formal political decision making that movements could have. The importance of open states with strong administrative capacities has been emphasized (Kitschelt, 1986; Kriesi et al, 1995). Broad characteristics of state institutions such as the nature of electoral rules or the division of power between branches of government have been said to offer multiple points of access and veto and, thus, provide favourable contexts for the impact of mobilization. For example, Kitschelt's (1986) analysis of anti-nuclear policy making points out, among other factors, to the number of political parties, factions, and groups as a characteristic of openness which can be favourable to the intrusion of anti-nuclear opponents such as Green Parties. In analyses of single countries, measures of electoral volatility are used to capture the level of access that challengers might gain to the system (Meyer and Minkoff, 2004).

The empirical studies presented here also include fragmentation as a measure of formal access to political decision making, while acknowledging that this does not completely exhaust the concepts of state openness and multiple veto points, and that it could work differently for the two issue areas included (Giugni, 2004). For this, the effective number

of parties in a system is included as a control variable in the relationship between public claim making and policy outputs and agendas. Having more access to the political system could, on the one hand, decrease the amount of claim making, since citizens or movements can take differential routes for affecting policy. However, it can also be that when there are more parties in a system there is a higher chance for them to capitalize on the grievances of society and to exert policy change. While these two different possibilities are not individually explored in the following empirical studies, the question I plan to address by including this variable is whether public claim making still has an impact on policy outputs and agendas above and beyond the formal access they may have to power. Therefore, while not denying any independent influence that fragmentation could have on outputs and agendas, the hypothesis included here is that public claim making still makes a difference, independent of the effective number of parties in a system.

(H6): Public claim making events have a positive impact on policy outputs and agendas regardless of the number of effective parties in a system.

While not commonly addressed in studies of political opportunity structures, another feature of the political context that can be discussed under this heading is country wealth. This has been previously analysed in studies of responsiveness or congruence to public opinion and appears to have an impact on policy outputs, and on expenditure in particular. For example, Bartels (2008) finds that the wealth of a country is one of the most consistent predictors of cross-national variation in policy responsiveness to public preferences for expenditure as national economic capacity can highly restrict the policy space of governments. Assuming that a similar argument could hold for public claim making's influence on policy outputs and agendas, country wealth is included as a control variable in the following empirical studies. Again, without denying the independent influence that

wealth could have on policy outputs and agendas, the focus will fall on observing whether wealth hinders the effect of public claim making. Just like for the openness of the political system, I expect public claim making to have a positive effect on outputs and agendas irrespective of country wealth.

(H7): Public claim making events have a positive impact on policy outputs and agendas regardless of country wealth.

3.3.4 Political Mediation Models

In what regards the system of alliances that movements can have, building on the political context approach, Amenta et al (1994) and Amenta and Poulsen (1996) propose a political mediation model arguing that successful mobilization requires mediation by supportive or sympathetic actors in political institutions. According to this view, institutional political actors must see benefits in including or aiding a group and to see the group as potentially facilitating or debilitating their own goal. Along the same lines, a challenger is likely to need a favourable elite context in order to produce change. For example, Meyer and Minkoff (2004) analyse the Democratic advantage in Congress as a factor improving the prospects of certain challenging groups mobilizing and exercising influence.

However, while having specific parties centred on an issue could be argued to increase public claim making's influence, when looking at general elite support for issues (in other words, the declarative support of all elected parties) this might actually also decrease its influence. There could be two mutually non-exclusive mechanisms through which this negative interaction could take place. On the one hand, general elite support for issues could have a "thermostatic" effect as challengers would have less reasons to mobilize once there is enough formal support for the issues they care about. If parties in a legislature are generally more supportive of a certain issue, it is already more likely that governmental and

legislative activities will be relatively more focused on that particular issue area, decreasing the challenger's "want" for that issue. Political parties in parliament could, therefore, also act strategically and show declarative support for issues through a process of anticipatory adaptation in order to curb public controversy. On the other hand, public claim making could become less effective just because expenditure and legislative activities are already driven by the general support of parties in parliament, and the additional difference that claim making makes beyond that becomes negligible. In both situations, decreasing the amount of public claim making and/or decreasing the effect of public claim making, we would notice a negative interaction effect.

(H8): The more supportive political elites are for a certain issue area, the more policy outputs and agendas are focused on that certain issue area.

(H9): The more supportive political elites are for a certain issue area, the lower the effect that public claim making events have on policy outputs and agendas in that issue area.

While this dissertation does not include a full analysis of the causal mechanisms through which this negative interaction happens, Chapter 7 tests whether the thermostatic effect takes place when claimants already (partially) obtain what they want. While not looking specifically at the effect of elite support on mobilization, the chapter inquires into whether gaining or loosing policy output benefits for an issue has a thermostatic effect on mobilization for that issue. In other word, it tests whether more expenditure for an issue decreases participation intentions for that issue. Even if not focused specifically on parliamentary party support, but rather on the reverse effect that outputs have on mobilization, the analysis in Chapter 7 could still be used to indicate whether such a curbing effect takes place and mobilization is reduced.

3.3.5 The Public Opinion Model

While political mediation models argue that movements must have sympathetic elites to produce change, public opinion models emphasize the need for a sympathetic public opinion. These models usually rest on assumptions embedded in the democratic theory of politics according to which office-holders usually act in accordance with the majority of the population since they want to win re-election (Soule and Olzak, 2004). Embracing a model of representative democracy, these studies argue that shifts in public opinion will produce shifts in the behaviour of power-holders and, consequently, in policy outputs (Stimson et al, 1995).

However, scholars working in this tradition evaluate the effect of public opinion at different degrees. On the one hand, some argue that when public opinion is taken into account, the influence of other factors should decrease or be null (Burstein and Linton, 2002). Social movements or collective mobilization are seen as having only an indirect impact on policy outputs and agendas, since political elites are said to respond to claims that are supported by a majority of citizens, rather than just particular interests, in order to increase their chances for re-election (Giugni and Passy, 1998). On the other hand, others propose an amplification model according to which mobilization affects policy independent of public opinion support, but the impact of mobilization is augmented depending on this support (Agnone, 2007). Yet others find that public opinion does not generally make any difference in what regards the direct effects of movements (Uba, 2009). Costain and Majstorovic (1994) argue for four prevailing interpretations of the relationship between public opinion and legislative action: a public opinion interpretation stating a direct influence of public opinion on legislative action, an interpretation that looks at public opinion as a filter for outside events' impact on legislative action, an elite behaviour interpretation in which elites are the ones affecting and moulding public opinion, and, finally, a social movement interpretation, whereby legislation results from the joint action of social movements and

public opinion.

In a similar manner, recognizing several different models of the role of public opinion in facilitating movements' impact on policy, Giugni and Passy (1998) test a mediation-effect model, a joint-effect model, and a direct-effect model of social movements and public opinion's impact. Using regression analyses of the mobilization of ecology, anti-nuclear, and peace movements in the United States between 1975 and 1995, their results show that the three movements did not have a substantial direct impact on public policy. Furthermore, the mediated-effect model was also not supported by the empirical evidence, while the joint-effect model fitted the data the best.

In his study of the influence of minority protest on the answers and rhetoric of federal government concerning ethnic and racial communities, Gillion (2013) incorporates mass preferences in a two-step model, implying a mediated relationship. For this he develops a theory of the continuum of information of protest and argues that information is expressed by movements in several ways and that these characteristics prompt government actors to pay attention to their concerns (the levels of contention, organizational structures of protest movements such as size, persistence, etc.). Public opinion is then included in the model as an intermediary step by means of a two-stage regression analysis. At a first step, Gillion (2013) analyses the influence that this continuum of information has on public opinion. He then uses the predicted probabilities obtained in a second stage where responses from the government are assessed.

Following these lines of investigation, the analyses presented here also include public opinion as a relevant determinant of policy outputs and agendas. I, therefore, hypothesize that the more sympathetic public opinion is to a certain issue, the more favourable the policy outputs and agendas for that issue area will be.

(H10): The higher the public opinion support for a certain issue, the more policy out-

puts and agendas are focused on that certain issue area.

Finally, in line with the research pointing to a joint effect of collective mobilization and public opinion, I also test an interaction effect between the two. Following previous empirical findings, I expect a sympathetic public opinion to be beneficial to public claim making and, therefore, enhance its effect on policy outputs and agendas in a certain issue area.

(H11): The more supportive public opinion is for a certain issue, the higher the effect that public claim making events have on policy outputs and agendas in a certain issue area.

There are two mutually non-exclusive explanations of why this positive interaction effect takes place. On the one hand, this positive interaction effect could happen because politicians might listen to public claims more when they also know these are backed by large public opinion support. One the other hand, the positive interaction effect could also happen due to a social desirability effect, as people might mobilize more when they know others are also supportive by the issues they care about. The second explanation is tested in Chapter 7 by means of an vignette experiment.

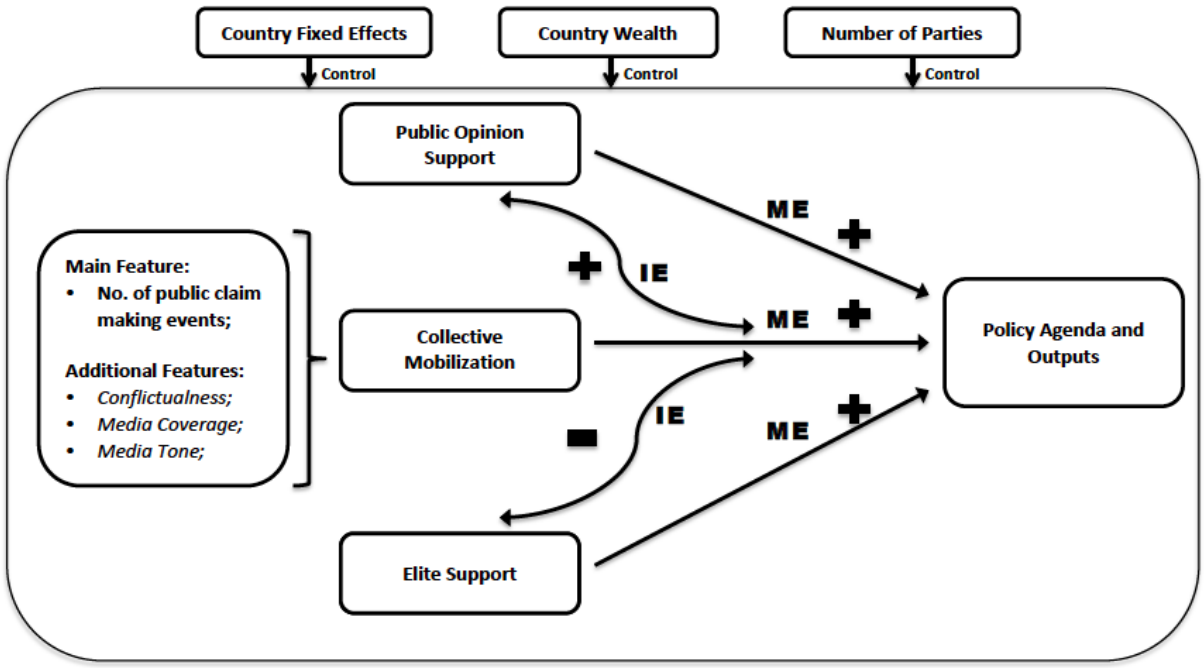
3.3.6 Similarities and Differences across the Two Issue Areas

The measures of public claim making and its context included here focus on two issue areas, environment and education. The choice for these two issue areas was guided, on the one hand, by its advantages in terms of measurement and data availability, and, on the other hand, by some of the similarities that these two issue areas share. Therefore, both of these issues are easily defined and tractable, which makes the task of identifying public claims and policy outputs and agendas for these two issue areas easy. Secondly, not

only legislative measures, but also policy outputs in the form of public expenditure are important for both of these issue areas and can be considered a collective benefit. This is in contrast to issues like abortion or gun control where legislative measures might be of higher importance and where policy outputs are harder to measure. Thirdly, these issues constantly experience a relatively high amount of public claim making across all countries in the sample and are often identified among the top value priorities of European opinion polls. This means that there are many measurable instances of public claim making for the two that also vary throughout the years included in the sample. Last but not least, these issues also benefit from higher data availability not only in what regards public claim making and policy outputs and agendas, but also on public opinion and parliamentary party support, making it possible to extend the empirical scope of the analyses included here.

Despite these broad similarities, the two issue areas also differ especially in one respect. Educational issues are generally considered more salient than environmental issues in what regards both public opinion and policies across many of the countries in the sample (see descriptive statistics in Chapters 4 and 5). This difference between the two allows testing whether the hypotheses and model introduced here function in a similar way across issue areas sharing a wide range of characteristics, but differing in salience. Related to this difference in salience, support for the environmental issue areas is more often shown by single-issue parties, while education is commonly tackled by all major parties, which could distort some of the results related to general elite support. Otherwise, when it comes to general differences in the saliency of these two issue areas across the countries in the sample (but not through time), these are controlled for by the country fixed effects introduced in the empirical tests. The empirical chapters allow, therefore, for looking only at variations over time, while controlling for differences over space (see Section 4.3).

Figure 3.2: A New Model of Dynamic Representation



Note: IE = Interaction Effect; ME = Main Effect;

3.4 Summing-up: A New Model of Dynamic Representation

This section embeds the theoretical models on the impact of collective mobilization on policy outputs and agendas into a more comprehensive model of representation, including contextual factors. This model considers both public claim making events and a supportive political context with a sympathetic public opinion and a supportive elite as important elements in guiding shifts in policy outputs and agendas. In other words, the model indicates that these three elements move meaningfully over time, which makes outputs and agendas shift in response to them. The model is considered a dynamic one due to the fact that it is mainly focused on over-time moves and on interactions between the different channels of expressing and organizing grievances. Additionally, the dynamic model of

representation included here is expanded in Chapter 7 with an analysis of the reverse effects that policy outputs and public opinion have on mobilization, in order to obtain a better pictures of the dynamics between these factors. The data used for each element included in the model (Figure 3.2) is further presented and described in the following empirical chapters.

The central element taken into account in the model is the amount of public claim making events. This is hypothesized to have a significant positive main effect on policy outputs and agendas (the central ME arrow in Figure 3.2). In qualifying this general model, several other characteristics of public claim making events can be taken into account and tested. Therefore, the empirical analyses in Chapters 4, 5, and 6 also look at how conflictual events are, at how much coverage they obtain in the media, and at whether these events are portrayed as positive in media (media tone).

In addition to the impact of public claim making, features of the context not only influence policy outputs and agendas on their own, but also interact with public claim making in influencing them. Both public opinion and elite support are hypothesized to have significant positive main effects on policy outputs and agendas. Additionally, in line with previous theoretical and empirical research on these three main elements, public opinion and public claim making are expected to reinforce each other's effect on policy outputs and agendas. In other words, public opinion is expected to interact positively with public claim making (the upper IE arrow in Figure 3.2). On the other hand, elite support, as one of the main allies of collective mobilization in the political opportunity structures literature, can actually interact negatively with public claim making, as taking an alternative route for expressing grievances might matters less once there is enough formal support for these issues. Additionally, there could be a thermostatic effect as once there is enough formal support for an issue, people might engage less. Political parties, thus, might already show support for issues through a process of anticipatory adaptation in

Table 3.1: Indicators and Data Sources

Concepts	*Indicators*	*Data Sources*
Public Claim Making Events	Amount, Conflictualness, Media coverage, Media tone	Global Dataset of Events, Language, and Tone (GDELT, 2016)
Elite Support	Support for an issue in manifestos of elected parties	Manifesto Project Data (Lehmann et al, 2015)
Public Opinion	Value Priority	Eurobarometer Survey (2016)
No. of Parties	Effective Number of Political Parties	Democratic Electoral Systems Around the World (Golder, 2005)
Wealth	GDP per capita	The World Bank (2016)
Policy Outputs	Public Expenditure	EUROSTAT (2013); UNESCO-UIS (2016)
Policy Agendas	Governmental Events Legislative Activities	GDELT (2016) Comparative Agendas Project (2015)

order to curb public controversy. In this dynamic model of representation, elite support is, therefore, expected to interact negatively with public claim making by reducing its effect on policy outputs and agendas (the lower IE arrow in Figure 3.2).

The effective number of parties in a country, as indicative of the openness of the political system, and country wealth are taken into account and controlled for as features of the context that change through time and could influence policy outputs and agendas on their own. Country fixed effects are also included in order to control for other unaccounted differences between the countries and in order to isolate the time-variant effects that the three main elements of the model have on policy outputs and agendas.

The data sources used for each element of the model are presented in Table 3.1. A more fine-grained description of these datasets, the indicators chosen, their measurement, and eventual aggregation over time can be found in the following empirical chapters.

Though mainly included for inquiring into reverse causality in the relationship between policy outputs and mobilization, Chapter 7 can also be used for shedding light into the mechanisms through which the interaction effects in Figure 3.2 take place. On the one hand, this chapter looks at whether policy outputs have a thermostatic effect on mobilization intentions in which increases and decreases in outputs produce the opposite effect on mobilization intentions. This thermostatic effect could indicate that a similar curbing of mobilization could happen when elite support is high for an issue. On the other hand, the chapter also checks whether public opinion has a social desirability effect on mobilization intentions as people might tend to participate more when they know the general public opinion is more supportive of their cause, which is also in line with the positive interaction effect between the two. The model and hypotheses used for this last chapter are discussed there and are not included in Figure 3.2.

All in all, in a similar fashion to the political opportunity structures literature and the agenda-setting literature, through this model the dissertation also attempts to integrate the social movements and political parties literature and, thus, sociological and political perspectives on collective mobilization and political representation, which have for a long time been disconnected (Hutter and Vliegenthart, 2018). Assessing this model empirically provides us with a better understanding not only on the immediate impact of mobilization and the role that parliamentary parties play in this process, but also on political issue priorities and how certain issue areas become prioritized and more salient or contentious than others, aspects crucial to the viability of liberal democracy, which increasingly suffers from citizen dissatisfaction with and disengagement from politics.

Chapter 4

Public Claim Making and Policy Outputs

4.1 Introduction

While collective mobilization has been for a long time considered to be an important factor in driving policy outputs and agendas (Amenta et al, 2010), the empirical scope of previous analyses has often been limited, focusing mostly on case studies of specific movements, covering small samples of countries, or focusing on few causal factors rather than working with more comprehensive models that include a host of contextual factors. The empirical analyses included in this chapter aim to enlarge the geographical and temporal scope of research on mobilization's consequences. In doing so, the chapter focuses on analysing the effect of public claim making events together with several contextual factors and of the interactions between them on policy outputs. The measure of policy outputs used here is public expenditure in the environmental and education issue area. The chapter uses public claim making and public expenditure data in 26 European countries between

2002 and 2013 using a dataset compiled from multiple sources specifically for this purpose. Section 4.2 is dedicated to providing a description of the data used for each public claim making characteristic and contextual factor included in the model, together with the public expenditure data used for measuring policy outputs. Sections 4.4 and 4.4 analyse the impact of public claim making events and their context on public expenditure for each issue area, environment and education, in part.

For both the environment and education issue areas, I test the model introduced in Chapter 3 and its afferent hypotheses. Firstly, I test the hypothesis according to which the amount of public claim making events positively influences policy outputs. The conflictual nature of these events, their media coverage, and the media tone with which events are reported are also included in the analyses. Secondly, hypotheses related to the structure of the state and to broad country characteristics are included by controlling for the effect of the effective number of parties in a country and yearly wealth measured through GDP (Kitschelt, 1986; Bartels, 2008). Finally, regarding the system of alliances that collective mobilization has, political mediation models (Amenta et al, 1994; Amenta and Poulsen, 1996) arguing that successful mobilization requires mediation by supportive or sympathetic actors in political institutions and public opinion models (Burstein and Linton, 2002) emphasizing the role of a supportive public opinion are considered. For elite and public opinion support I test not only their independent effects on expenditure, but also the amplifying or diminishing interaction effects that they might have together with claim making on expenditure.

The results suggest than when accounting for observed and unobserved differences between countries and looking only at effects over time, the number of public claim making events is a significant predictor of differences in public expenditure for both the environment and education issue areas. However, elite support influences this effect in the environmental issue area. The declarative support of parties in parliament for an issue area curbs the

effect that public claim making has on policy outputs. All in all, the results lend support for several hypotheses on which the dynamic model of representation introduced in Chapter 3 is based.

4.2 Data

For testing the dynamic model of representation introduced in Chapter 3, data from several databases have been compiled specifically for this purpose. The unit of analysis used is country-year and, thus, each observation included consists of a yearly score following aggregation of public claim making events characteristics (see description of the data and aggregation choices in Section 2.4), elite support, and public opinion. Aggregating at the yearly level and looking at yearly effects also makes sense in terms of the response variable analysed since policy outputs in the form of public expenditure are usually set and calculated annually. The final compiled dataset comprises of yearly observations for 26 countries in the European Union over the 2002-2013 period. The countries included are: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Croatia, Hungary, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovenia, Slovakia, Spain, Sweden, and the UK. While the dataset used for obtained public claim making events and their characteristics would have allowed for a larger temporal and geographical scope, the data on contextual factors such as public opinion and on public expenditure reduces the size of the available sample.

4.2.1 Policy Output Data - Public Expenditure

In terms of the environmental issue area, public expenditure data was obtained from the EUROSTAT (2013) dataset on environmental related government expenditure. Environ-

mental public expenditure in this dataset is defined as the money spent on all activities directly aimed at the prevention, reduction and elimination of pollution or nuisances resulting from the production processes or consumption of goods and services. Excluded are activities that, while beneficial to the environment, primarily satisfy technical needs or health and safety requirements. This indicator is restricted to measuring expenditure and revenues in the public sector as a percentage of the country's GDP. More specifically, expenditure is calculated as the sum of total investments (both treatment and prevention investments) and total current expenditure (both in-house expenditure such as the use of energy, material, maintenance and own personnel for environmental protection, and fees/purchases of environmental protection services, both from public and private producers). For the public sector in particular, total environmental protection expenditure also includes subsidies and investment grants that are paid to other sectors for environmental protection activities. Payments of general environmental or green taxes (such as energy taxes) are excluded from the indicator's calculation.

For the education issue area, expenditure data was obtained from the United Nations Educational, Scientific, and Cultural Organization Institute for Statistics (UNESCO-UIS, 2016) and based on World Bank estimates. The indicator used was total government expenditure on education as a percentage of the country's GDP, which also includes expenditure funded by transfers from international sources to governments. General government expenditure refers to spending done by central governments, as well as local and regional governments.

Guided by the idea that the effects of public claim making events happen over time, especially concerning budgets and expenditure, the dependent variable is measured one year after the event data. Additionally, this can also be considered a precautionary measure against reverse causality issues.

4.2.2 Political Context, Public Opinion, and Elite Support Data

Firstly, as far political context and broad country characteristics are concerned, the effective number of parties in a country-year is taken into account using the Democratic Electoral Systems Around the World dataset Golder (2005). Additionally, GDP per capita (The World Bank, 2016) in each year is also used for controlling for country wealth.

Secondly, as far as sympathetic political actors are concerned, the measure of elite support included here reflects the extent to which parliamentary parties engage with a certain issue area by explicitly declaring care or support for an issue in their manifestos. Therefore, this measure captures for each party the proportion of its manifesto showing support for the respective issues, subsequently weighted by the proportion of the party's parliamentary seats (Lehmann et al, 2015). The measure that each party scores in this fashion is then aggregated to obtain a score of declarative elite support for issues for each legislature in the countries included. Since the aggregation is done by legislature, this indicator of elite support is only measured on election years. Because of this, its value for a certain election year is kept as the value for all subsequent years until the next election. While this reduces the yearly variation in parliamentary party support that one could capture, the indicator can still be used to measure variation in support across election cycles and, therefore, can at least imperfectly be used for observing the effect of elite support on outputs and its interactions with public claim making.

Finally, following the literature emphasizing the role of public opinion support in the relationship between collective mobilization and policy outputs, measures of public preferences regarding the environment and education issue areas are included. For this, the analyses use value priority data from the bi-yearly Eurobarometer Survey (2016) showing the percentage of respondents in the survey identifying the environment or education as one of the two most important issues facing their country. For the countries in which bi-yearly data is available, the responses are averaged to an yearly value, while for the

countries in which only one survey per year was collected that value is the one used.

4.3 Methods

Following Beck and Katz's (1995) suggestion for analysing time-series cross-sectional data, the models presented here are estimated using an estimator of the covariance matrix of the estimated parameters called "panel-corrected standard errors (PCSE), that is robust to the possibility of non-spherical errors" (Bailey and Katz, 2011, p. 2). Additionally, since the effect of public claim making events and political context are expected to happen over time rather than immediately, the independent variables were lagged one year before the main dependent variable. This also helps in solving reverse causality problems regarding any effect that policy outputs could have on public claim making in its turn.

However, when running a regression model including all the indicators chosen on the pooled sample of country-years it might be that an initially observed relationship between a predictor and the dependent variable is due to time-invariant country-level characteristics that are correlated with the predictors. Introducing country-level fixed effects in the model would control for this possibility by imposing time independent effects for each entity (country dummies). Thus, if there are omitted variables which could be correlated with the variables in the model, then fixed effects models may provide a means for controlling for these omitted variable bias (Allison, 2009).

One disadvantage of fixed effects models is that they remove the between-country variation by leaving only time-variant effects to be observed (within countries over time). Since the Intra Class Correlation values in the analyses below show that most of the variation in our sample is precisely between countries (rather than within them), one would initially consider these kind of models not suited for the case at hand. However, the interest of this study falls not on explaining all (or more) of the variation in public expenditure, but rather

on checking if any of that variation is significantly predicted by yearly variation in event related characteristics, public opinion, and elite support. Therefore, introducing country dummies that remove the between-country variation is not problematic in the case at hand since what we want to test is precisely whether that part of the variation in expenditure that is time-variant (varies only across time) is due to public claim making events.

However, the models presented here do not include a lagged dependent variable and period dummies among the predictors, like in the initial Beck and Katz model (Beck and Katz, 1995, 1996; Beck, 2001). This is because the lagged dependent variable and period dummies would produce an unjustified absorption of time-series variance. In other words, time variation in the dependent variable can be absorbed by these theoretically uninteresting variables. Plumper et al (2005) argue that if the dependent variable exhibits a general time trend and at least one variable has persistent effects, "the coefficient of the lagged dependent variable is biased upwards, while the coefficients of the other independent variables are likely to be biased downward". Researchers may in this way wrongly miss interesting effects in the independent variables that actually explain the trends. Additionally, since in the case at hand there is large variation mostly between countries in terms of public expenditure, I consider the fixed effects to partially solve the problem of consistent country level differences in yearly public expenditure values. The fixed effects, therefore, also partially account for the problem of path dependency in the dependent variable.

4.4 Public Claim Making and Public Expenditure for the Environment

4.4.1 Trends in the Environment Issue Area

Table 4.1 presents the characteristics of environmental public claim making, as well as of other features of the political environment, for all the 26 countries in the dataset in the period 2003-2012 (2004-2013 for the response variable, public expenditure, due to lagging).

Table 4.1: Descriptive Statistics - Environmental Issue Area

Statistic	N	Mean	St. Dev.	Min	Max
No. Events	260	20.7	42.7	0	380
Conflictual	260	−0.6	2.1	−10.0	5.2
Tone	260	3.7	2.3	0.0	11.2
Coverage	260	5.5	6.3	0.0	73.4
Elite Supp.	260	405.2	199.0	54.5	1,054.3
Public Op.	247	4.5	4.6	0.0	27.0
GDP/1000	260	29.5	13.7	7.8	91.4
No. Parties	260	5.0	1.8	2.0	11.8
Env. Expend.	225	0.6	0.3	0.02	1.9

In terms of public claim making characteristics, the first indicator used is the number of events in a certain year. This ranges from 0 events reported in certain years to 380 events reported in others, with a mean of around 20 events reported per year. The mean yearly aggregated Goldstein scale score, measuring how conflictual events were, was -0.6 with a standard deviation of 2.1 for the country-years included in the sample. This indicates that forms of public claim making tend to be rather neutral or not very disruptive on average. Furthermore, we can see that environmental events were on average reported in 5.5 news items. As far as media tone is concerned, while the scale ranges from -100 (very negative) to 100 (very positive), since the overall GDELT data includes all types of events from

military actions to public speeches, the empirical range of scores for environmental events is quite small (0 to 11.2) for the selected period. We can see that in the environmental issue area there are no events rated on the negative side of the scale. The tone with which these are reported in the media, therefore, is never truly negative, but ranges from neutral to positive.

In what regards the political context in which environmental public claim making operates, the countries included had on average 5 effective parties and an average GDP/capita of 29,500$, but with quite some variation across country-years for both variables. In terms of sympathetic political actors in Parliament, the indicator used was the proportion of party manifestos showing support of environmental issues weighted by the proportion of seats in Parliament of the parties who had those manifestos and summed for a certain legislature. The absolute values are, therefore, difficult to interpret but we can say that when dividing the value by 100 we get a rough percentage of a legislature's support for environment. Using this measure the average legislature in the sample appears to be roughly 4 per cent supportive of environmental issues, but there is quite some variation across country-years in elite support for environmental issues (standard deviation of around 1.9 per cent). Finally, the yearly values for public opinion support in the sample range from 0 to 27 per cent of people listing the environment as one of the two most important issues facing their country, with a mean of 4.5 per cent, indicating, as expected, that the environment is not on the top priority list for a majority of the population. In terms of the dependent variable measuring policy outputs, the mean public environmental expenditure in the 26 countries in the dataset is 0.6 per cent of the country's GDP with a minimum of 0.02 per cent and a maximum of 1.9 per cent.

While Table 4.1 allowed exploring the general variation in public claim making, contextual factors, and policy outputs across all country-years in the dataset, Figure 4.1 allows a closer look into within-country variation. It, thus, presents the joint distributions of the

standardized aggregated values by country for these indicators in three random countries in the dataset across time (see Appendix A for the trends in all countries included). When looking at over time variation for the indicators chosen, we can notice large differences both across time and across countries which makes it hard to spot patterns or relationships just by looking at these graphs. We can see that there are major differences between the trajectories of environmental protection expenditure (the black line) over time across countries. Some countries increase their expenditure over time (e.g. Belgium), others decrease their expenditure (e.g. Spain), while others went through an initial period of expenditure contraction, followed by increases in later years (e.g. Slovakia).

This large difference in expenditure trends across countries is also supported empirically by running a model without any predictor and just a random intercept. Looking at the Intra Class Correlation (ICC) from this model we can measure how much variance we have at the between country level. The ICC indicates that this is 0.837, meaning that around 83 per cent of the variance is between countries rather than within countries. This suggests that expenditure is more of a "trait" of countries (varies among countries, but not much within countries at different occasions), rather than a "state" (does not vary much across countries, but varies a lot across occasions). Nevertheless, as Figure 4.1 shows, after accounting for these differences between countries, there still remains variation in time trends in levels of public expenditure within countries that could be meaningfully explained by yearly trends in public claim making and time-variant contextual factors.

4.4.2 Do Environmental Public Claims Matter?

Models 1, 2 and 3 in Table 4.2 show the sizes and significance levels of the effects of the predictors without fixed effects (1), with fixed effects (2), and with fixed effects and interactions (3). All models presented include panel corrected standard errors and the independent variables are lagged one year before the dependent variable measuring pub-

Figure 4.1: Trends in the Environmental Issue Area in Spain, Slovakia, and Belgium

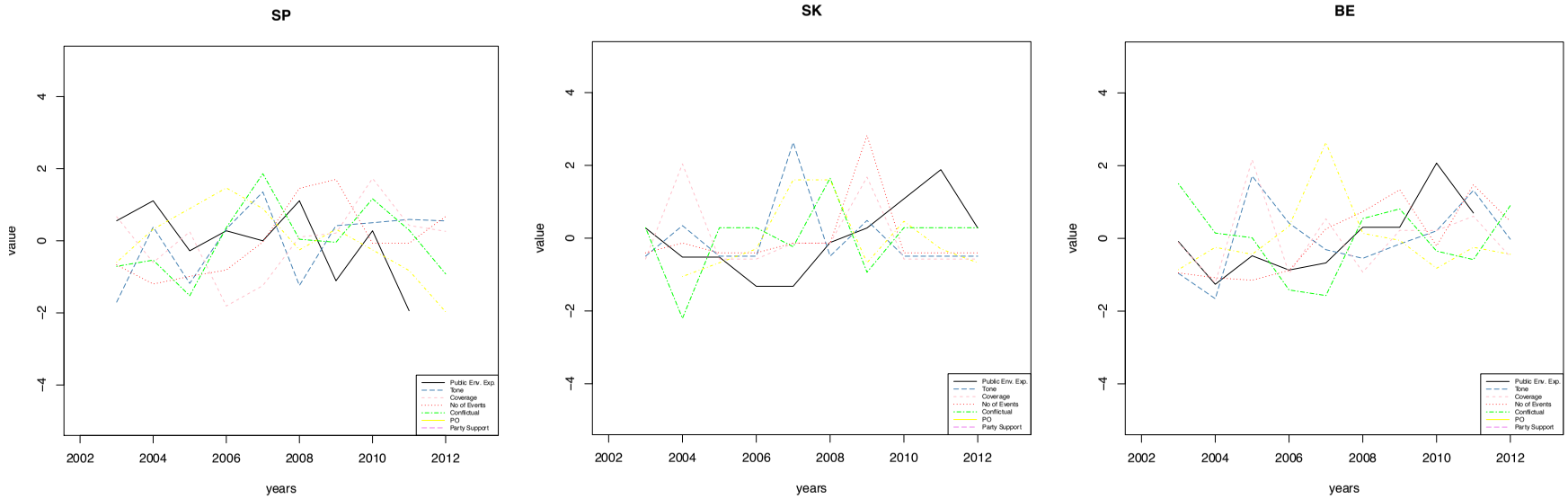


Table 4.2: Effects on Public Expenditure for the Environment

	DV: Public Expenditure for the Environment		
	(1)	(2)	(3)
	*no fixed effects	*fixed effects	*fixed effects & interactions
No.Events	0.001*	0.001***	0.003***
	(0.000)	(0.0003)	(0.001)
Conflictual	0.001	−0.003	−0.002
	(0.010)	(0.004)	(0.004)
Coverage	−0.002	−0.002	−0.002
	(0.002)	(0.001)	(0.001)
Tone	−0.022	−0.002	−0.002
	(0.014)	(0.005)	(0.005)
GDP/1000	0.004***	0.002	0.001
	(0.001)	(0.002)	(0.002)
No.Parties	−0.018*	0.006	0.009
	(0.009)	(0.010)	(0.010)
Elite Supp.	−0.0005***	−0.0001	0.00001
	(0.0001)	(0.0001)	(0.0001)
Public Op.	0.015***	−0.002	−0.003
	(0.004)	(0.002)	(0.003)
Events*Elite Supp.			−0.00000***
			(0.00000)
Events*Public Op.			0.00002
			(0.0001)
Constant	0.780***	0.589***	0.559***
	(0.092)	(0.112)	(0.117)
Observations	214	214	214
R^2	0.095	0.874	0.877
Adjusted R^2	0.060	0.851	0.853
Residual Std. Error	0.308 (df = 205)	0.123 (df = 180)	0.122 (df = 178)
F Statistic	2.701*** (df = 8; 205)	37.828*** (df = 33; 180)	36.235*** (df = 35; 178)
Note:			*p<0.1; **p<0.05; ***p<0.01

lic expenditure. In all three models, irrespective of specification, the amount of public claim making shows as significantly influencing public expenditure for the environment in subsequent years.

The results of Model 1 support a public opinion hypothesis stating that the higher the public opinion support for an issue, the higher the policy outputs for that issue (Burstein and Linton, 2002; Giugni and Passy, 1998). When it comes to the environment, a 1 per cent increase in public opinion support produce, on average, a 0.015 per cent of GDP increase in environmental expenditure (significant at the 99% level). The results also show an effect of country wealth on environmental expenditure suggesting that a 1000$ increase in GDP would produce a 0.004 per cent of GDP increase in spending (significant at the 99% level). Finally, the results also suggest a significant effect ($p < 0.01$) of party support on policy outputs. However, quite surprisingly, this effect is not in the hypothesized direction, showing that an increase of 1 on the scale measuring supportive manifestos of parties in Parliament (equivalent to roughly a 0.01 per cent increase in the support of the legislature) produces a 0.0005 per cent of GDP decrease in environmental spending. This significant negative effect could also be an artefact of the model not including fixed effects that adjust for general country differences. Because of these unaccounted for country differences, the model also explains only 9.5 per cent of the variation in public expenditure (adjusted $R^2 = 0.095$). This poor model fit value is expected since, as we saw above, most of the variation is between-countries rather than within.

Unsurprisingly, after introducing fixed-effects (2) the coefficient of model fit improves drastically, 87.4 per cent of the variation in the response variable being explained (adjusted $R^2 = 0.874$). However, what is more surprising about this model is that once time-invariant effects were controlled for, context-related predictors no longer reach significance. The only predictor with a significant effect at the 99% level is the amount of public claim making. The size of this effect is also not negligible, a single new public claim making event

reported in the media being able to produce, on average, a 0.001 per cent of GDP increase in environmental protection expenditure. Since there were on average 21 public claim making events a year in the countries include, this translated into an average increase of 0.021 per cent of GDP yearly. This suggests that the previously observed effect that public opinion, elite support, and country wealth had on expenditure was not due to variation in yearly values, but was rather driven by overall differences between countries. Therefore, the fixed-effects model suggests that when we look only at yearly differences in expenditure and controlling for all the differences that might be due to country characteristics, it is only the number of public claims that produces a significant difference in policy outputs. All in all, even if Italy might have higher environmental protection expenditure just by being Italy (see Appendix A for size and significance levels of the country fixed effects), there is still variation in expenditure between years that is significantly explained by public claim making events.

When looking at the interaction between public claim making and the sympathetic alliances they might gather in Model 3, we see that the hypothesized negative interaction effect between elite support and public claim making is supported. This interaction effect is significant at the 99% level, but the size of the effect is small[1]. Therefore, in our sample the higher the elite support for environmental issues, the lower the effect that public claim making events have on public expenditure for the environment. This means that elite support diminishes, even if very slightly, the positive influence that claim making has on policy outputs supporting the negative interaction effect hypothesized in the model of dynamic representation in Chapter 3. Finally, in terms of the interaction with public opinion, while the coefficient is in the right direction suggesting a positive influence of

[1]In Appendix A this interaction effect was also tested in a simpler model excluding controls and the results are congruent with the ones found here (see Table A.5).

public opinion on the impact of public claim making on policy outputs, it does not show up as significant.

4.5 Public Claim Making and Public Expenditure for Education

4.5.1 Trends in the Education Issue Area

Table 4.3: Descriptive Statistics - Education Issue Area

Statistic	N	Mean	St. Dev.	Min	Max
No. Events	275	599.3	1,972.8	0	17,951
Conflictual	275	0.7	1.1	−4.8	3.9
Tone	275	5.9	1.1	0.0	8.8
Coverage	275	5.4	2.0	0.0	12.8
Elite Supp.	275	558.6	193.8	29.0	1,080.3
Public Op.	225	6.8	5.1	0.9	31.1
GDP/1000	275	26.9	9.6	7.1	46.4
No. Parties	275	5.0	1.9	2.0	11.8
Edu. Expend.	238	5.2	1.1	2.3	8.6

Table 4.3 presents the characteristics of public claim making in the education issue area together with other features of the political environment. The dataset for education contains 25 countries for the period 2002-2012 (2003-2013 for government educational expenditure due to lagging). Compared to the dataset used for the environment issue area, Luxembourg is not included in the analysis for education due to the fact that education expenditure data was not available for this country. Additionally, the time frame is one year longer than for the environment issue area due to more data availability for the indicators included.

In terms of public claim making characteristics, we can notice that the number of claims

related to education is much higher than the one for environmental public claims. While public claims for the environment were on average around 20 per year, there are almost 600 public claim making events for education on average and their number ranges from 0 in certain years to more than 17000 events in others. As far as how conflictual these public claims were, the mean yearly aggregated Goldstein scale score was 0.7 with a standard deviation of 1.1 for the country-years included in the sample, which indicates that education public claim making events are also mainly neutral, but slightly less conflictual than environmental ones. Additionally, similar to public claims for the environment, education events were on average reported in around 5 news items. As far as media tone is concerned, the empirical range of scores for education events is even smaller than that for environmental events (0 to 8.8), without any events rated on the negative side of the media tone scale. All in all, just like for environmental events, the tone with which education events are reported in the media appears to never be truly negative in the dataset, but ranges from neutral to positive.

In what regards the political context in which these claims are made, due to the exclusion of Luxembourg from the sample of the education issue area, the average GDP is slightly lower than for the environmental issue area sample (26,900$). The measure of party manifestos showing support for education translates into an average of roughly 5.5 per cent support for education in the legislatures included in the sample, but with a wide variation across country-years (standard deviation of about 1.9 per cent). The yearly values for public opinion support range from 0.9 to 31.1 per cent of surveyed people listing education as one of the two most important issues facing their country, with a mean of 6.8 per cent. As already mentioned and expected in Section 3.3.6 education is on average considered more salient by survey respondents than the environment, though only slightly. Last but not least, in terms of the dependent variable measuring policy outputs, the countries in the sample spend on average 5.2 per cent of their GDP on education, with a minimum of

2.3 per cent (Bulgaria in 2003) and a maximum of 8.6 per cent (Denmark in 2009). Again, as expected in Section 3.3.6, public expenditure for education is much higher than the one for environment, which was on average only 0.6 per cent of GDP and ranged only between 0.02 and 1.9 per cent.

These differences between the two issue areas allow us to check whether the model introduced in Chapter 3 holds and works in a similar manner across these two issue areas that share a wide range of characteristics (expenditure is an important output for both, there is constant public claim making for them across the countries in the sample, etc.), but that differ in their overall salience both in what regards the public, and in what regards policy outputs.

Figure 4.2 presents the joint distributions of the standardized aggregated values by country for the indicators chosen for three random countries in the dataset across time (see Appendix A for trends in all the countries included). Just like for the environmental issue area, there are major differences between the trajectories of public expenditure for education (the black line) over time, across countries. Some countries increase their expenditure over time (e.g. Finland), some decrease it (e.g. Hungary), while others are experiencing both periods of increase and decrease (e.g. Slovakia). Again, we can run a model without any predictor and just a random intercept and look at the Intra Class Correlation (ICC) which indicates how much variance we have at the between country level. The ICC is 0.899, suggesting that around 89.9 per cent of the variation in public expenditure for education is between countries rather than within countries. Just like expenditure for the environment, public expenditure for education also seems to be more of a country "trait", which doesn't vary as much within countries at different occasions as it varies between different countries.

Figure 4.2: Trends in the Education Issue Area in Finland, Slovakia, and Hungary

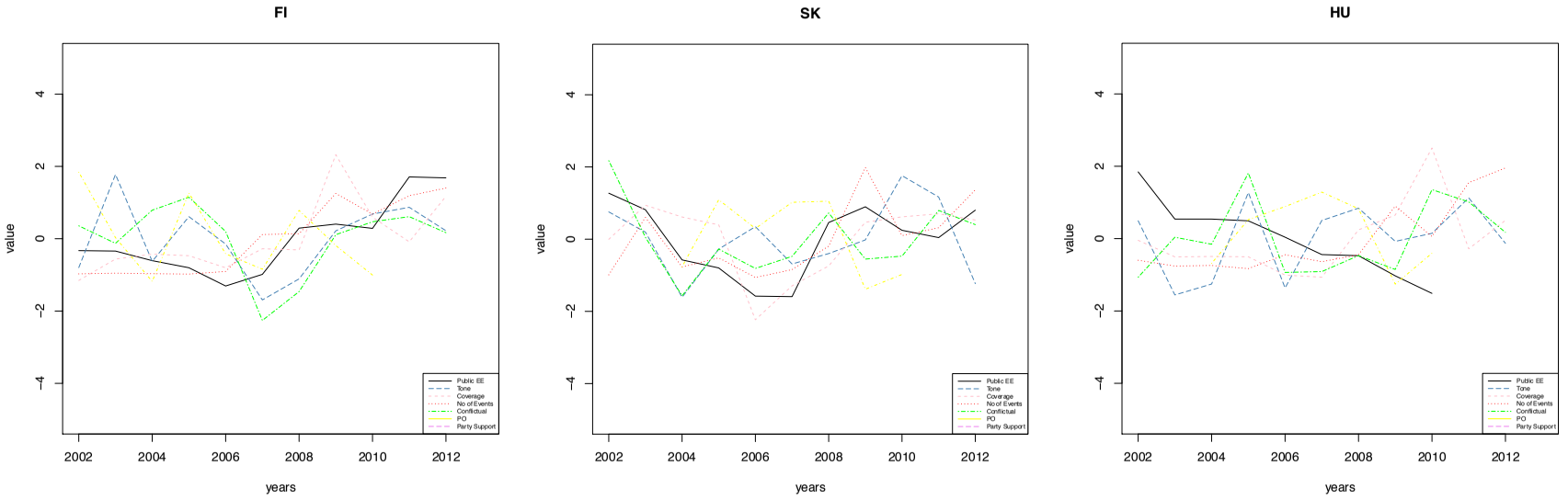


Table 4.4: Effects on Public Expenditure for Education

	DV: Public Expenditure for Education		
	(1)	(2)	(3)
	*no fixed effects	*fixed effects	*fixed effects & interactions
No.Events	−0.00005	0.00003***	0.00000
	(0.00003)	(0.00002)	(0.0001)
Conflictual	0.054	0.019	0.018
	(0.083)	(0.022)	(0.022)
Coverage	0.026	0.017	0.016
	(0.030)	(0.017)	(0.016)
Tone	0.025	−0.056	−0.054
	(0.107)	(0.047)	(0.048)
GDP/1000	0.055***	0.036***	0.035***
	(0.006)	(0.014)	(0.014)
No.Parties	0.041***	0.065***	0.063***
	(0.015)	(0.017)	(0.017)
Elite Supp.	0.001***	0.0001	0.0001
	(0.0004)	(0.0002)	(0.0002)
Public Op.	0.028**	−0.003	−0.004
	(0.011)	(0.009)	(0.010)
Events*Elite Supp.			0.000
			(0.00000)
Events*Public Op.			0.00000
			(0.00000)
Constant	2.525***	4.047***	4.097***
	(0.554)	(0.519)	(0.530)
Observations	197	197	197
R^2	0.334	0.930	0.930
Adjusted R^2	0.306	0.917	0.916
Residual Std. Error	0.894 (df = 188)	0.309 (df = 164)	0.311 (df = 162)
F Statistic	11.807*** (df = 8; 188)	68.477*** (df = 32; 164)	63.787*** (df = 34; 162)
Note:			*p<0.1; **p<0.05; ***p<0.01

4.5.2 Do Education Public Claims Matter?

In analysing the effect of public claim making on public expenditure for education, again, even if the previously checked ICC values suggest that most of the variation in the sample is between countries, I use fixed effects regression models with panel corrected standard errors. This is because the focus does not fall on explaining all (or more) of the variation in education expenditure, but rather on checking if any of that variation across time is significantly predicted by time-variant public claim making characteristics and contextual factors. I present below both the results of the models without country fixed effects, but also the results of models with country dummies and interactions.

Table 4.4 shows the sizes and significance levels of the effects of the main predictors without fixed effects (1), with fixed effects (2), and with fixed effects and interactions (3), using panel corrected standard errors. When running the model without fixed effects for countries (1) we can see that none of the public claim making indicators reaches significance, while all of the context indicators, measuring broad country characteristics, public opinion, and elite support, appear to have a significant impact on public expenditure for education. The adjusted R^2 value for this model is a bit higher than the one for the no-fixed effects model for the environment (adjusted $R^2 = 0.334$) suggesting that more than 33 per cent of the variation in public expenditure is explained by public claim making and time-variant contextual factors alone.

The results for this model are in line with some previous findings in the political opportunity structures literature and the public opinion literature, suggesting that including contextual variables into the analysis takes away the effect that events might have on policy outputs. Firstly, regarding sympathetic actors, the results suggest a small, but significant effect ($p < 0.01$) of elite support on education expenditure. An increase of 1 on the scale measuring supportive party manifestos in Parliament (equivalent to roughly a 0.01 per cent increase in the support of the legislature) produces a 0.001 per cent of GDP increase

in educational spending. As far as public opinion is concerned, the results also show that the higher the support of public opinion for education, the higher the government's expenditure. A 1 per cent increase in public opinion support would produce, on average, a 0.028 per cent of GDP increase in educational spending (significant at the 95% level). Lastly, both the effective number of parties and wealth appear to significantly influence educational expenditure ($p < 0.01$). The sizes of these effects are also quite high. A 1000$ increase in GDP would produce a 0.055 per cent of GDP increase in spending, while having one more effective party would increase educational expenditure by 0.041 on average.

The coefficient of model fit again improved drastically after introducing fixed effects in Model 2. In this case, the country dummies together with the time-variant public claim making characteristics and contextual factors explain 91.7 per cent of the variation in public expenditure for education across the sample (adjusted $R^2 = 0.917$). In this model, once the country fixed effects were introduced and we look only at effects over time, the number of public claim making events appears to significantly influence public expenditure for education, even when controlling for context related characteristics and the support of other actors for the issue area. Since public claims for education are more common (see Table 4.3), the size of the effect that these have on expenditure is a bit smaller than the one for environmental claims. Thus, each new event is able to produce, on average, a 0.00003 per cent of GDP increase in government's expenditure on education. Considering there are on average 600 public claims regarding education in the country-years included, this translates into an average increase of 0.018 per cent GDP per year, an effect size similar to the one obtained in the case of environmental issue area. Therefore, the fixed-effects model suggests that when we look only at yearly differences in public expenditure and control for all the differences that might be due to time-invariant country characteristics, the amount of public claim making does have a significant impact on policy outputs in the form of public expenditure. All in all, if events cannot explain much of the difference in

expenditure when between and within country variations are lumped together (Model 1) because differential levels of expenditure appear to be more of a trait of countries, when looking at changes across time their effect becomes significant (Model 2).

While the amount of public claim making appears consequential for policy outputs in both issue areas, there are some differences in the results when it comes to contextual factors. Thus, while context related variables were not able to significantly predict any time variation in expenditure for the environment, the effective number of parties and the wealth of the country appear significant in predicting expenditure for education. With each additional party, expenditure for education increases by 0.065 per cent of the GDP on average ($p < 0.01$). While this effect is puzzling, the reason why the effective number of parties did not show significant for the environmental issue area could be related to the fact that environmental issues are more commonly tackled by single-issue parties. While fragmentation could be thought of as a measure of the openness of the system, it does not fully capture this aspect related to single-issue parties. Therefore, it could be that fragmentation fares better as a measure of openness when it comes to issue that are commonly tackled by all parties, such as education[2]. Country wealth measured through GDP also appears to be significant at the 99% level even after including country fixed-effects. A 1000$ increase in GDP would produce on average an increase of 0.036 per cent of GDP in the government's expenditure on education. While the effect of the number of parties is more puzzling, I suspect that the main reason for the difference in the effect of wealth in the two issue areas lies in the higher popularity of the education issue area. Therefore, as suggested in the literature on policy responsiveness to public opinion (Bartels, 2008),

[2]When trying to see whether education is more popular among smaller parties (i.e. parties who obtained less than 25 per cent of the seats in the legislature), the results are mixed. The median education support is close to than for the environment. The mean of environmental support is higher, but with a very large standard deviation. This indicates that fragmentation cannot not fully capture this single-issue party aspect (see Table A.6 in Appendix A).

wealthier countries or years could be characterized by a larger policy space and by more manoeuvring room in which education could have preferential access over environmental issues.

Model (3) focuses on the interaction effects that public claim making has with public opinion and elite support. When it came to the environment, supportive parties in parliament appeared to slightly decrease the impact of public claim making, which supports the hypothesized relationship between the two in the dynamic model of representation. However, no significant interaction between public claim making, elite support, and public opinion is observed in the case of education.

4.6 Discussion

The agenda put forward in the introduction of the dissertation indicated that analyses of collective mobilization's consequences could be expanded by taking into account a larger number of contextual factors and the interactions between them, by focusing on observing more closely effects over time, and by enlarging the empirical scope of the analyses both geographically and temporally. Recognizing these needs, this chapter analysed the effect of public claim making on policy outputs in the form of public expenditure for two issue area, environment and education. The model of dynamic representation introduced in Chapter 3 focused on the impact of public claim making characteristics including the role of public opinion and elite support and the possible influence of a host of contextual factors. This model was tested here for both issue areas in part. The data used for testing the model covered 26 European countries between 2002 and 2013, therefore going beyond the empirical scope of previous analyses of collective mobilization consequences which were often limited to studying single countries and/or single movements. The analyses in this chapter also concentrate on dynamic effects that take place over time, therefore going

beyond static collective mobilization analyses. In this respect, the method used allowed for checking if public claim making and contextual factors have any over time effects on public expenditure, while controlling for unobserved country differences through fixed-effects.

The results indicate that there are wide differences among countries in what regards the trajectories of public expenditure on both the environment and education, with no general upward or downward trend. Additionally, public expenditure appears to be more of a "trait" of countries that varies mostly between them, rather than a "state" that varies more across time within countries. Since most of the variation in expenditure is at the country level, it could be argued that introducing country fixed-effects that remove this variation is problematic. However, since the focus of the analysis does not fall on explaining as much variation as possible in public expenditure, but on testing whether any of its over time variation is significantly impacted by public claim making, the analyses use fixed effects and panel corrected standard errors.

As far as the environmental issue area is concerned, the amount of public claim making significantly predicts public expenditure in the fixed effects model, net of the support of public opinion, parliamentary parties, and other factors. With every new 21 public claim making events for the environment, public expenditure increases with 0.021 per cent of GDP. Considering that public expenditure for the environment varies between 0.02 and 1.09 per cent of GDP in the sample, the size of this effect is not negligible. This suggests that the previously observed effect that the number of parties, wealth, public opinion and elite support had on expenditure is not actually due to variation in their yearly values, but it is rather driven by overall differences between countries. When we control for unobserved differences between countries, the number of public claim making events becomes the only factor that significantly explains yearly variation in policy outputs in the environmental issue area.

In order to further inquire into the role of sympathetic actors for aiding or hindering

collective mobilization's effect, I also looked at how public claim making interacts with elite support and public opinion support for the environment. As hypothesized in the dynamic model of representation introduced in Chapter 3, the results point to a negative interaction effect between elite support and public claim making. The greater the general level of support of parties in parliament for the environmental issue area, the smaller the effect that collective mobilization has on policy outputs. On the one hand, once formal support for environmental issues grows, the importance of additional claim making for the same issue decreases. On the other hand, since demand is partially satisfied, this negative interaction could happen through a thermostatic effect on claimants' part as once there is enough formal support for an issue, they mobilize less. Parties could, therefore, engage into a process of anticipatory adaptation in order to curb contention for an issue. While this dissertation does not include a full analysis of the causal mechanism through which this negative interaction happens, Chapter 7 tests whether more gains for issues (in the form of policy outputs) have any thermostatic effect on mobilization. The chapter finds support for such a thermostatic effect, as gains increase, mobilization intentions drop.

In what regards the education issue area, when looking only at variation over time in the fixed effects model, public claim making again has a significant impact on policy outputs in the form of public expenditure. Since there are considerably more events related to education than to environment, on average every new 600 public claim making events produce a 0.018 per cent of GDP increase in expenditure for education. When it comes to context, the effective number of parties and the wealth of the country also have a significant effect on over time variation in education expenditure. While it is puzzling why fragmentation leads to more spending on education, but not on the environment, one of the reasons could be related to the fact that environmental issues are more commonly tackled by single-issue parties. While fragmentation could be thought of as a measure of the openness of the system, it does not fully capture this aspect related to single-issue

parties. Therefore, it could be that fragmentation fares better as a measure of openness when it comes to issue that are commonly tackled by all parties, such as education. As far as wealth is concerned, the main reason for this difference in the two issue areas can be explained by the fact that wealthier countries or years are expected to be characterized by a larger policy space and by more manoeuvring room in which education, due to its higher salience, could have preferential access over environmental issues.

While the data I used allowed for observing effects over a larger geographical area and time frame than previously done in the field, one problem lies in its inability to discern between the more fine-grained goals of the public claim making events or between movement and counter-movement events. However, the two issue areas chosen for analysis come close to being valence issues for which we rarely have counter-movements. Additionally, one can assume that a high number of events concerning a certain issue area are still to have an information effect by drawing attention to that issue area, independent of the more fine-grained distinctions in goals. The policy outputs measure used also regards the general issue areas, rather than fine-grained policies, which goes in line with observing such information effects. Therefore, the results for both the environmental issue area and the education issue area, show that when controlling for country differences, the amount of public claim making, irrespective of the fine-grained distinctions among the goals of each event, does make a difference in policy outputs. The more public claim making there is, the more expenditure for that issue increases in subsequent years.

Chapter 5

Public Claim Making and Policy Agendas

5.1 Introduction

The results of Chapter 4 suggest that public claim making events have a significant impact on how policy outputs in the form of public expenditure vary over time. This effect is above and beyond context related factors, and therefore net of the political opportunity structures or allies that collective mobilization might have. In addition to this overall effect, the overall support of parties in parliament, as one of the two main "allies" posited by the political opportunity structures literature, appears to have a slightly diminishing effect on the impact of public claim making, but only in the environmental issue area. In order to further inquire into these relationships, this chapter attempts to look at another impact form that collective mobilization as public claim making can have. For this, the chapter tests the same model of dynamic representation introduced in Chapter 3, but focuses on two different dependent variables which measure policy agendas.

For studying the impact of public claim making and the interplay it has with public opinion and elite support, the chapter includes two separate measures of policy agendas. The first measure, analysed in Section 5.2, focuses on governmental events reported in the media as related to the environmental and education issue areas. Namely, this part analyses events or public claims initiated by a governmental actor and directed to another governmental actor as a measure of the attention paid to these issues as captured by the media. The second measure, analysed in Section 5.3, includes legislative processes and more specifically debates, interpellations, and questions asked in legislatures and related to the environmental and education issue areas. The data used for each measure is described in their respective sections.

The results support the dynamic model of representation with its central hypothesis of a significant main effect of public claim making also when it comes to policy agendas. Additionally, similar to the results of Chapter 4 focusing on policy outputs, elite support appears to interact negatively with public claim making in its influence on agendas. This suggests again that public claim making as an alternative route for expressing grievances matters (or happens) less once there is enough formal support for these issues. As argued, this effect could happen because high elite support for an issue would make additional claim making for the same issue matter less and/or through a thermostatic effect on claimants' part as once there is enough formal support for an issue they mobilize less. The dynamic model of representation in Chapter 3 also hypothesizes a positive interaction of public opinion with public claim making. While this hypothesis was not supported at the level of policy outputs, public opinion and public claim making appear to reinforce each other's effect on governmental and legislative activities measuring policy agendas. Finally, the results also suggest that the time-span of public claim making matters. The amount of events over time (yearly vs. monthly) can be interpreted as a display of commitment. A consistently high number of events over the course of a year reflects more sustained

preferences for an issue compared to events in a single month. Therefore, long-term, sustained (yearly) signals appear to be more effective than short-term (monthly) signals about public preferences.

5.2 Public Claim Making and Governmental Claims in the Media

5.2.1 Data and Methods

The first agenda measure used in this chapter focuses on governmental events related to the environmental and education issue areas. This refers to events and claims that happen between governmental actors and that are reported by the media as pertaining to the two issue areas. If public claim making events were selected as all those events initiated by civil society actors (NGOs, individuals, etc.) in a certain issue area, governmental events were selected as all those events initiated by a government related body (the executive, governing parties, coalitions partners, executive divisions, etc.) and aimed at another government related body and falling into the specific issue area. These include a wide range of events from ministries making public statements or attending cabinet meetings, to news about new regulations being announced (for a sample of all the types of events included in the GDELT dataset see Table 2.2). Of course, since the events included are only those reported in the media, the attention that governmental bodies might pay to a certain issue area can be higher than the one measured here since many smaller events are not reported or can happen behind closed doors. However, this media based measure helps in conveying at least part of the agenda effect that public claim making might have (and is also supplemented by another measure in Section 5.3).

The sample used for analysing impact on governmental events is the same as the one

used in Chapter 4 and includes 26 European countries between 2002 and 2013. Details on the measurement and descriptive statistics of the indicators measuring public opinion support, elite support, country wealth, and effective number of parties can also be found in Chapter 4. In terms of the distribution of governmental events in the country-years in the sample (Table 5.1), we can first see that these tend to be fewer than the public claim making events in the same issue area. While on average there were around 20 public claim making events for the environment, there were only an average of 3 governmental events related to the environment in the country-years included. For education, the sample had an average of almost 600 public claim making events and only around 5 governmental ones. While these low numbers might be an artefact of using only events reported in the media and that are the main topic of an article, this bias is expected to be stable across the country and years included and, therefore, still allows us to check whether yearly variations in these events are influenced by public claim making.

Table 5.1: Descriptive Statistics - Governmental Events

Statistic	N	Mean	St. Dev.	Min	Max
PCM Events Env.	260	20.7	42.7	0	380
Gov. Events Env.	260	3.1	6.8	0	53
PCM Events Edu.	275	599.3	1,972.8	0	17,951
Gov. Events Edu.	275	4.9	14.4	0	156

Note: PCM = Public Claim Making

5.2.2 Results

The models presented in Table 5.2 show the sizes and significance levels of the effects of the predictors together with fixed effects using panel corrected standard errors for the two issue areas under consideration. For the environmental issue area, Model 1 indicates that the amount of public claim making is the only significant predictor ($p < 0.01$) of governmental

events once time-invariant effects are controlled for. In other words, net of contextual factors, with every new 100 public claims for the environment reported in the media, there are on average about 5 new governmental events for the same issue ($\beta_{No.Events} = 0.049$). Given that in our sample we have around 20 public claim making events and 3 governmental events a year, the size of this effect is quite large.

While context related variables do not appear to have any significant main effect on policy agendas, I further test their influence by introducing interaction effects in Model 2 (Table 5.2). In line with the dynamic model of representation introduced in Chapter 3, I check for the interactions between public claim making, public opinion, and elite support. For the environmental issue areas, the results support the hypothesized positive interaction between public claim making and public opinion. Therefore, the more supportive the public opinion for environmental issues is, the stronger the effect that public claim making has on policy agendas.[1]

When it comes to the education issue area, Model 3 in Table 5.2 shows that public claim making significantly predicts governmental events for education as well. With each additional 167 public claims for education, 1 new governmental event is reported in the media ($\beta_{No.Events} = 0.006$). The size of this effect again appears quite large given the big number of public claim making events for education in the sample (around 600 per country/year on average) and the small number of governmental events (around 4.9 per country/year on average). In what regards contextual factors, again these do not appear to have any significant independent effect on the education policy agenda measured through governmental events. However, when further testing their influence by looking at interactions (Model 4), the results point to a negative effect of elite support on the impact

[1]Since we are using continuous variables, the null effect that public claim making appears to have in this model is not of much importance due to the fact that we have very few instances in the data when the two covariates used in the interaction terms are 0.

that public claim making has on governmental events. Therefore, the more supportive of education the manifestos of parties in parliament, the smaller the effect that public claims have on governmental attention to issues. This can be explained by the same mechanism as before, namely that once there is enough formal support for a certain issue, public claim making happens or matters less. In other words, this negative effect could be explained by a thermostatic effect insofar public claim making could be reduced once there is enough formal support for an issue, as well as because a high elite support for an issue would just make additional claim making for the same issue superfluous.

5.3 Public Claim Making and Legislative Attention to Issues

5.3.1 Data

The second agenda measure used here looks at how much legislatures engage in an issue area. For building this measure I use data from the Comparative Agendas Project (2015) (CAP) that investigates trends in policy-making across time and countries. The dataset classifies a wide range of policy activities into a single coding scheme using 20 major issue topics to code those activities. This allows me to identify those policy activities that are specifically related to the environment or education issue areas. The type of policy activities and processes that CAP tracks take many different forms, including debating a problem, delivering speeches, (e.g. the Queen's speech in the United Kingdom), holding hearings, introducing or enacting laws or issuing judicial rulings.

However, the many different types of policy processes included also constitute one of the problematic aspects of using the CAP legislative data for cross-country analyses. This is because countries vary quite a lot not only in the kind of legislative activities they have and

Table 5.2: Effects on Governmental Events

	Environment		Education	
	(1)	(2)	(3)	(4)
	*fixed effects	*fixed effects & interactions	*fixed effects	*fixed effects & interactions
No.Events	0.049***	0.031	0.006***	0.011***
	(0.007)	(0.050)	(0.001)	(0.002)
Conflictual	−0.180	−0.162	−0.050	−0.006
	(0.139)	(0.131)	(0.189)	(0.171)
Coverage	0.032	0.035	−0.077	−0.113
	(0.037)	(0.036)	(0.118)	(0.105)
Tone	0.217	0.230	0.297	0.254
	(0.164)	(0.161)	(0.279)	(0.307)
GDP/1000	0.053	0.026	0.037	0.137
	(0.109)	(0.104)	(0.101)	(0.084)
No.Parties	−0.156	−0.146	−0.461*	−0.243
	(0.175)	(0.180)	(0.277)	(0.230)
Elite Supp.	0.007	0.008	−0.009*	0.0001
	(0.007)	(0.008)	(0.005)	(0.002)
Public Op.	0.345	0.129	0.041	−0.080
	(0.265)	(0.289)	(0.137)	(0.104)
Events*Elite Supp.		−0.00003		−0.000009***
		(0.0001)		(0.000002)
Events*Public Op.		0.010***		0.0001
		(0.004)		(0.0002)
Constant	−6.854***	−5.616***	4.099***	−4.315***
	(3.324)	(4.848)	(6.583)	(5.176)
Observations	207	207	197	197
R^2	0.455	0.475	0.868	0.914
Adjusted R^2	0.351	0.367	0.843	0.896
Residual Std. Error	5.121 (df = 173)	5.056 (df = 171)	5.850 (df = 164)	4.766 (df = 162)
F Statistic	4.380*** (df = 33; 173)	4.420*** (df = 35; 171)	33.787*** (df = 32; 164)	50.419*** (df = 34; 162)
Note:			*p<0.1; **p<0.05; ***p<0.01	

are included in the dataset, but also in the amount of these activities. For example, some countries do not have specific Questions and Answer sessions recorded, but have other types of debates recorded. Also, some countries have unlimited Questions and Answers sessions in their legislatures making the number of such legislative activities quite large. In order to overcome these shortcomings, the analyses presented here look only at questions, debates, or interpellations as a measure of the legislative agenda. These legislative activities are not only the most widely recorded across the countries in the dataset, but also the ones which are most comparable. Additionally, in order to compensate for the fact that countries differ in the "amount" in which these activities are recorded and performed, the following analyses use country fixed-effects, but also country standardized values. Therefore, the dependent variable in these analyses records changes in the amount of these legislative activities, rather than the absolute amount of such activities.

Table 5.3 shows the countries for which time-series data on questions, debates, or interpellations was available. The number of countries and years for which data is available is quite small (7 countries over the 2002-2013 period). However, compared to the measure of public expenditure used in Chapter 4, these activities are measured daily and can be aggregated at a lower time period than the yearly one. Therefore, the unit of analysis used in this section will be country per month. While this primarily allows me to increase the sample size for performing the analyses, it can also be used to shed light on the hypothesis related to the difference between long-term and short-term signals in public claim making.

Lowering the level of time aggregation, we obtain a maximum sample size of 816 country/months (lower in the actual analyses due to missing data on other variables included in the model). Table 5.4 presents the distribution of legislative activities for the two issue areas for these country/months. We can see that the two issue areas fare quite similarly in terms of how much attention they seem to get from legislatures. Education is only slightly more addressed in questions, debates, and interpellations with an average of 4.8 such activ-

Table 5.3: CAP Countries and Legislative Activities

Country	**Legislative Activities**
Belgium	Oral Questions and Interpellations;
Denmark	Interpellations; Questions Hour; Questions Wednesday;
Italy	Question Time;
Hungary	Interpellations;
Spain	Oral Questions;
Netherlands	Debates; Oral Questions;
UK	Prime Minister Questions;

ities per month, compared to the environment issue areas which has about 4.2 questions, debates, or interpellations in legislatures per month. The range of monthly activities for the two issue areas is also similar, from both issues not being addressed at all in some months, to each of them being addressed for up to 75 times in other months.

Table 5.4: General Descriptive Statistics of Legislative Activities

Statistic	N	Mean	St. Dev.	Min	Max
Environment	816	4.2	9.0	0	75
Education	816	4.8	10.0	0	74

5.3.2 Results

The results presented here are used for assessing the impact of public claim making and contextual factors in the environmental and education issue areas using three different time lags for the legislative activities measure: agendas within the same month (T0), agendas measured with a one-month lag (T1), and with a two-months lag (T2). The analyses for public expenditure and governmental events used yearly aggregated values and a one year lag, which assumed that this is a period long enough for the effect of public claim making events, public opinion, and elite support to take place in what regards policy outputs and agendas. However, due to the lower level of aggregation used here, it is not clear how long

does it take for public claims to reach and influence policy agendas or whether their effects are stable over time. The use of these three different time lags allows assessing these issues.

In what regards the environmental issue area (Table 5.5), the stark difference to the other two analyses presented so far (on public expenditure and on governmental events) is the null main effect that the monthly number of public claim making events has on legislative activities. Yearly public claim making events significantly influenced budgets and governmental events in subsequent years. However, when looking at the monthly level, these appear not to influence legislative activities in the same month or in the following two months. As argued in Chapter 3, the difference between the yearly and the monthly number of events can be interpreted as a display of commitment as a consistently high number of events over the course of a year reflects more sustained preferences for an issue compared to events in a single month. Even if the dependent variable used here is different, the results could be interpreted as to suggest that long-term, sustained signals are more effective than short-term signals about public preferences.

One interesting finding in these models is the positive effect that conflictual events have on legislative attention (Model 1). Conflictual events are addressed in questions, debates, or interpellations in legislatures in the same month in which they happen. While the effect of how disruptive events are is toned down at the yearly level both in what regards expenditure and in what regards governmental events, conflictual events in the environmental issue area do seem to draw short-term attention in legislatures and make members of parliament address these (or the general issue area) in their questions or debates.

Most of the contextual factors included in the models do not appear to influence the legislative agenda, with the exception of public opinion which seems to be a stable predictor of legislative attention to issues with similar effect sizes across the different time lags used. However, since these contextual factors are measured at the yearly level (and held

constant for all months), while legislative attention is measured at the monthly level, this is not surprising. In terms of interactions, similar to the models presented above for governmental events, overall support of parties in parliament again appear to decrease the influence than public claims have on legislative agendas. Additionally, public opinion also appears to have an enhancing effect on how public claim making impacts legislative attention in subsequent months. This means that in the presence of a supportive public opinion, public claim making events for the environment have a stronger influence on how the environmental issue area is addressed in questions and debates in legislatures.

The results for the education issue area presented in Table 5.6 are similar to the ones for the environmental issue area. The number of public claim making events again seems to have no significant independent effect when it comes to monthly effects on legislative attention to education, while they appear to have a small negative interaction effect with elite support in the same month, effect which disappears, however, in subsequent months. The positive effect of how conflictual or disruptive events are on questions and debates in legislatures in the same month does not show when it comes to education. Instead, a negative effect of the level of disruptiveness at two months apart shows. This means that the higher the level of disruptiveness of events in a month, the less questions and debates there are about that same issue area at two months apart. Due to the large time lag between the measurement of disruptiveness of events and that of legislative activities, this effect is hard to interpret and remains puzzling.

In terms of contextual factors, both public opinion and elite support seem to be positively related to legislative attention to education issues. The more supportive parties in parliament are for the education issue area and the more positive the public opinion to education is, the more questions, debates, and interpellations there are about the education issue area both in the same month and at one or two months apart. While the positive effect of public opinion was also present in the environmental issue area, this positive effect

Table 5.5: Effects on Monthly Legislative Activities in the Environmental Issue Area

	Leg. Qs T0		Leg. Qs T1		Leg. Qs T2	
	(1)	(2)	(3)	(4)	(5)	(6)
No.Events	0.004	0.070***	0.0004	0.020	−0.006	0.003
	(0.004)	(0.018)	(0.004)	(0.018)	(0.005)	(0.018)
Conflictual	0.033*	0.038**	−0.004	−0.005	−0.011	−0.011
	(0.017)	(0.017)	(0.017)	(0.017)	(0.018)	(0.018)
Coverage	−0.0004	−0.005	−0.005	−0.006	0.003	0.003
	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Tone	−0.015	−0.021	−0.023	−0.024	−0.004	−0.004
	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)
GDP/1000	−0.013	−0.020	−0.007	−0.004	−0.016	−0.013
	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)
No.Parties	0.054	0.042	0.035	0.026	0.033	0.028
	(0.066)	(0.066)	(0.067)	(0.067)	(0.067)	(0.067)
Elite Supp.	0.0002	0.001**	0.0002	0.0004*	0.0001	0.0003
	(0.0002)	(0.0002)	(0.0002)	(0.0003)	(0.0002)	(0.0003)
Public Op.	0.046***	0.041**	0.043**	0.029*	0.054***	0.044**
	(0.016)	(0.017)	(0.017)	(0.017)	(0.016)	(0.017)
Events*Elite Supp.		−0.0001***		−0.00008***		−0.0001
		(0.00003)		(0.00003)		(0.00003)
Events*Public Op.		0.002		0.004***		0.003*
		(0.001)		(0.001)		(0.001)
Constant	−0.328	−0.079	−0.341	−0.385	−0.110	−0.154
	(0.777)	(0.776)	(0.782)	(0.784)	(0.789)	(0.794)
Observations	720	720	715	715	705	705
R^2	0.041	0.060	0.038	0.048	0.039	0.043
Adjusted R^2	0.022	0.039	0.019	0.026	0.019	0.021
Residual Std. Error	1.025	1.016	1.026	1.022	1.022	1.022
	(df = 705)	(df = 703)	(df = 700)	(df = 698)	(df = 690)	(df = 688)
F Statistic	2.134***	2.823***	1.971**	2.207***	1.992**	1.937**
	(df = 14; 705)	(df = 16; 703)	(df = 14; 700)	(df = 16; 698)	(df = 14; 690)	(df = 16; 688)

Note: *p<0.1; **p<0.05; ***p<0.01

of elite support did not show there. I suspect that the main reason for this difference in the two issue areas is the fact that support for the environmental issue areas is more often shown by single-issue parties, while education is commonly tackled by all major parties and, therefore, is better captured by the measure of elite support included here. Since the measure of elite support is calculated for each legislature and held constant for an entire election cycle, if in one election cycle there is a single-issue party supporting the environment, this hardly shows up as a monthly level effect, due to lack of variance over many more units in the analysis than at the monthly level.

5.4 Discussion

If Chapter 4 was dedicated to studying how the dynamic model of representation fares in terms of policy outputs, this chapter focused on policy agendas measured in two different ways. The first measure of policy agendas introduced here focused on governmental events related to the environment and education that were reported in the media yearly. The second measure looked at monthly legislative activities such as debates, interpellations, and questions related to the environmental and education issue areas.

In terms of governmental events, the results suggest that public claims have a positive effect in both the environmental and the education issue areas in subsequent years, net of contextual factors. When looking at how allies are involved in this relationship and testing for interaction effects, the results, however, look slightly different for the two issue areas. In what regards the environment, a positive interaction between public claims and public opinion was found. This indicates that the effect of public claim making on the amount of government events is stronger in the presence of a supportive public opinion. In what regards education, a negative interaction effect of elite support and public claim making is found. Thus, the more supportive parties in parliament overall are for education, the

Table 5.6: Effects on Monthly Legislative Activities in the Education Issue Area

	Leg. Qs T0		Leg. Qs T1		Leg. Qs T2	
	(1)	(2)	(3)	(4)	(5)	(6)
No.Events	−0.0003	0.004	−0.0005	0.003	−0.001	0.003
	(0.0004)	(0.003)	(0.0004)	(0.003)	(0.0004)	(0.003)
Conflictual	−0.005	−0.003	−0.006	−0.006	−0.043**	−0.043**
	(0.019)	(0.019)	(0.019)	(0.019)	(0.018)	(0.019)
Coverage	−0.005	−0.006	−0.0002	−0.001	−0.001	−0.001
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)
Tone	0.009	0.008	0.007	0.007	0.001	0.001
	(0.017)	(0.017)	(0.018)	(0.018)	(0.018)	(0.018)
GDP/1000	−0.012	−0.022	−0.013	−0.018	−0.006	−0.011
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.016)
No.Parties	−0.019	0.013	−0.005	0.035	−0.009	0.022
	(0.065)	(0.072)	(0.065)	(0.073)	(0.067)	(0.074)
Elite Supp.	0.001***	0.001***	0.001***	0.001***	0.0007***	0.001***
	(0.0002)	(0.0002)	(0.00024)	(0.0003)	(0.0003)	(0.0003)
Public Op.	0.058***	0.051***	0.057***	0.053***	0.053***	0.049***
	(0.015)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)
Events*Elite Supp.		−0.00001**		−0.00000		−0.00000
		(0.00000)		(0.00000)		(0.00000)
Events*Public Op.		0.0002		0.00001		0.00004
		(0.0002)		(0.0002)		(0.0002)
Constant	−0.003	0.014	−0.079	−0.310	−0.116	−0.272
	(0.820)	(0.872)	(0.832)	(0.887)	(0.856)	(0.909)
Observations	744	744	737	737	723	723
R^2	0.054	0.060	0.049	0.052	0.048	0.050
Adjusted R^2	0.036	0.040	0.031	0.031	0.029	0.028
Residual Std. Error	0.995	0.993	0.999	0.999	1.005	1.005
	(df = 729)	(df = 727)	(df = 722)	(df = 720)	(df = 708)	(df = 706)
F Statistic	2.959***	2.923***	2.681***	2.472***	2.524***	2.310***
	(df = 14; 729)	(df = 16; 727)	(df = 14; 722)	(df = 16; 720)	(df = 14; 708)	(df = 16; 706)

Note: *p<0.1; **p<0.05; ***p<0.01

smaller the effect that public claims have on governmental events related to education.

The second measure of policy agendas used consisted of monthly questions, debates and interpellations in legislatures related to the two issue areas. As far as effects at the monthly level are concerned, public claims appear not to have a significant effect suggesting that long-term signals about public preferences are more effective than short-term ones in producing a change in terms of attention to issues. This might be due to a cumulative effect, as many public claim making events at the yearly level stand as a display of commitment and show a sustained preference for an issue, while monthly public claim making do not imply this additional commitment element and might appear more volatile. While not having a significant main effect on monthly legislative activities, public claim making interacted negatively with elite support in both issue areas and positively with public opinion support in the environmental issue area.

When it comes to contextual factors, most of these do not influence legislative activities which is unsurprising since these contextual factors are measured at the yearly level (and held constant for all months), while legislative attention is measured at the monthly level. One exception is public opinion support which appears to have a consistent positive effect on legislative activities in both the environmental and the education issue areas across the different time lags used. Additionally, elite support for education seems to positively influence the number of questions and debates in legislatures related to the same issue. I suspect that the main reason for this difference in the two issue areas is the fact that support for the environmental issue areas is more often shown by single-issue parties, which might win seats in some election cycles, but do not provide enough variation for effects to show at the monthly level in terms of overall support of an entire legislature.

As it can be seen, there are slight differences between the two impact measures presented here and between the two issue areas analysed which are hard to explain post-hoc and might be, in part, data driven. Additionally, a lot of the agenda effects might not be captured by

these two measures since many talks in governments and legislatures happen behind closed doors or many might just not end up in the media or in the formal questions, debates, and interpellations sessions that legislature have. Nevertheless, this makes the measures of attention used here quite conservative, which should make it harder to capture significant effects.

Therefore, we can conclude that overall public claim making has a significant effect on policy agendas when measured through governmental events captured by the media. This effect becomes significant when we look at larger periods of time, as this stands as a display of commitment for an issue area. Nevertheless, we are still dealing with a dynamic phenomenon in which collective mobilization interplays with its environment in influencing governments and legislatures. Public opinion and elite support appear to be important features of this environment, though influencing public claim making in opposite directions.

Chapter 6

Comparing Protest and Public Claim Making

6.1 Introduction

One of the main choices and challenges that studies of collective mobilization using protest event analysis (PEA) face is related to the different types of events that can be included in the analysis. Regarding this, earlier generations of PEA focus mainly on street demonstrations (Hutter 2014, see Chapter 2 of the dissertation) and, therefore, often ignore that collective mobilization takes a wider variety of action forms. Newer generations of PEA criticize this singular focus on street demonstrations and argue for enlarging the types of events included in PEA in order to obtain better indicators for the level of contention in an issue area. As previously mentioned, Koopmans and Statham (1999) propose a concept of public claim making which incorporates more sophisticated and discursive forms of collective mobilization such as press releases or public statements through which actors might gain visibility for their claims on the public agenda. In looking at a wider variety of

public claim making actions, street demonstrations becomes just one of the many tools in the toolkit of mobilization.

Chapters 4 and 5 take into account this criticism and focus on the impact of public claim making events on policy outputs and agendas. In turn, this chapter addresses the question of whether looking at the wider public claim making repertoire or focusing on protest alone makes an empirical difference in terms of policy outputs as public expenditure. The first section explores the differences in protest and public claim making events descriptively in the 26 countries in the sample, for the 2002-2013 period, and for the two issue areas considered in the dissertation. The second section of the chapter focuses on assessing empirically the dynamic model of representation introduced in Chapter 3, but restricting it only to protest events. In other words, this sections looks at the impact that protest events, public opinion, elite support, and the interactions between them have on policy outputs in the form of public expenditure.

The results suggest that the characteristics of protests events are slightly different than those of public claim making events. Unsurprisingly, the two types of events are especially different in terms of their number and their conflictual character. For the environmental issue area the number of protests does not correlate with the amount of public claim making as there were very few instances of protests in the data (1 protest per year on average). This made it harder to notice a significant impact of those protests on yearly expenditure. For the education issue area, as the number of protests is larger and it also correlates with public claim making, the results mirror very closely those obtained using public claim making events. This indicates that, despite the difference in characteristics between the two, the influence of protest events on policy outputs is not starkly different from that of public claim making. Nevertheless, focusing only on protest events when trying to see how and whether citizens can affect politics through alternative routes omits some of these channels that citizens undertake to make their voices heard. Therefore, for issues in which

protest events are few it is hard to notice any significant difference in their broader impact, such as yearly public expenditure for issues.

6.2 Protests vs. Public Claim Making across time and countries

6.2.1 The Environmental Issue Area

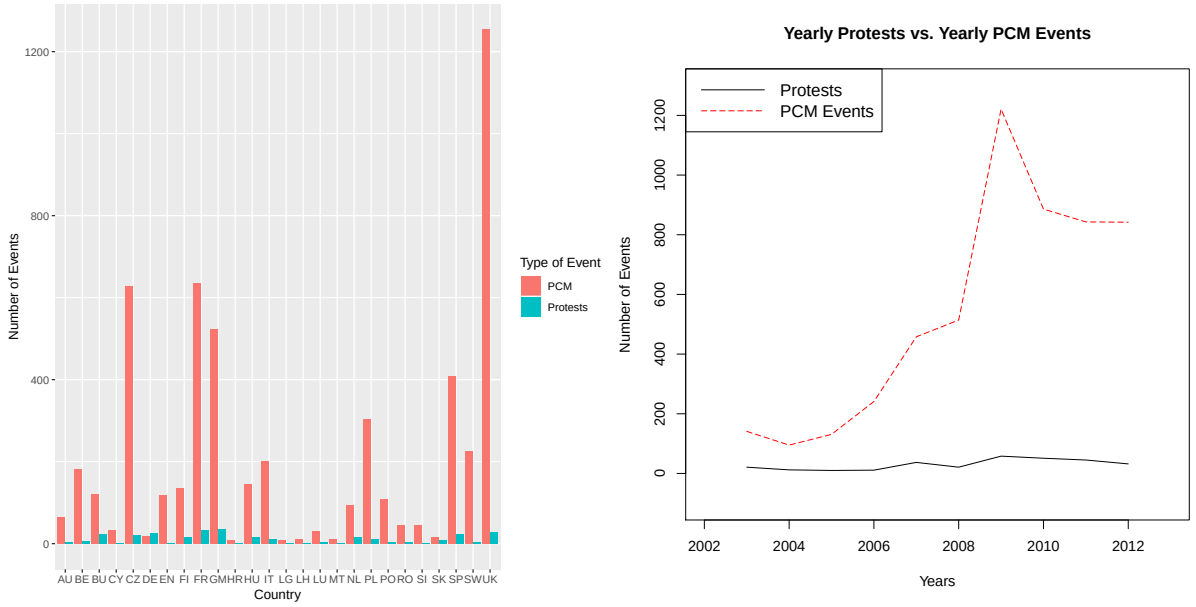
Public claim making events were obtained from the GDELT (2016) data as all those events that were related either to the environment or to education, were mentioned in the lead paragraph of a news item, were initiated by a civil society organization, movement, or individual, and were targeted at both governments and companies pertaining to a country. Protest events were selected following the same rules in terms of news items and actors, but restricting the type of events in Table 2.2 to only those that were coded in the "PROTEST" category.

As far as the environmental issue area is concerned, we can notice quite some difference between the amount and features of protest events and those of public claim making. While the number of environmental public claims ranged from 0 to 380 in certain country-years, the number of protests is much lower, with maximum 14 protests in a year (Germany in 2010 when anti-nuclear protests happened in Berlin and beyond) and an average of about 1 protest per year (see Table 6.1). Regarding other features of protests, we notice that these also tend to be more conflictual on average than public claim making events, with a score of -2.3, compared to -0.6 (on the Goldstein Scale ranging from -10 to 10). They also tend to be referred to on average in less news items (1.8 news items, compared to 5.5 news items) and, when they are, they tend to receive a slightly less positive media tone (1.3 on a scale from -100 to 100, compared to 3.7).

Table 6.1: Descriptive Statistics of Protest Events - Environment

Statistic	N	Mean	St. Dev.	Min	Max
			Protest Events		
No. Events	260	1.1	2.2	0	14
Conflictual	260	−2.3	3.1	−7.5	0.0
Coverage	260	1.8	3.4	0.0	27.0
Tone	260	1.3	2.0	0.0	7.2
			Public Claim Making Events		
No. Events	260	20.7	42.7	0	380
Conflictual	260	−0.6	2.1	−10.0	5.2
Coverage	260	5.5	6.3	0.0	73.4
Tone	260	3.7	2.3	0.0	11.2

Figure 6.1: Protests vs. Public Claim Making - Environment



(a) Events by Country

(b) Events by Year

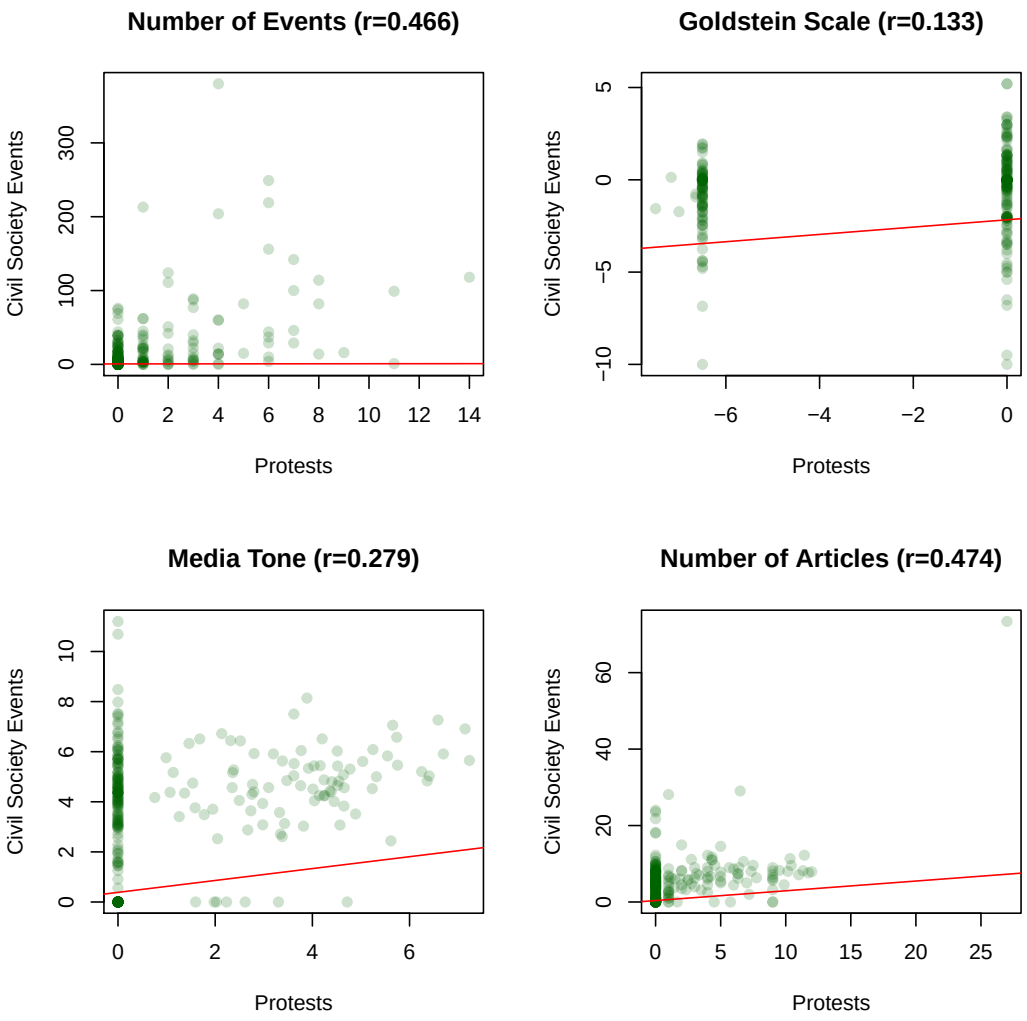
Figure 6.1 illustrates yearly trends in the number of protests and public claim making events for all countries (left image), and for all years (right image). At a first sight we can notice the large difference in the number of events both per year and per country in the two graphs. Additionally, the amount of public claim making is characterized by a positive trend with events increasing over time, while the time trend for protest is a bit more flat especially since there aren't many such events in general. As far as country differences are concerned, countries that have more environmental public claims (e.g. UK, Spain, France, Germany) tend to also have a higher number of environmental protest events. This indicates that while the number of the two differs widely, there could be a positive correlation between them (for yearly within-country trends in protest events see Figures C.1, C.2, and C.3 in Appendix C).

Running a Pearson's correlation between the features of environmental protest and environmental public claim making we see that association between the two, while being significantly positive, is not very strong (r=0.466 for the amount of events, see Figure 6.2, upper left plot). In other words, the number of environmental protests in a certain country-year is not strongly associated with the number of environmental public claims, with a lot of country-year cases falling away from the line of best fit. Despite being more similar in their range of values, the same can be said about the other three features that were measured for these events: how conflictual events were, how many news items reported them, and how positive the tone of these was. None of these three features are strongly associated for environmental protest events and environmental public claim making events.

6.2.2 The Education Issue Area

The number of protest events in the education issue area has a wider range than the number of environmental protests, with up to 371 protests events in a year (UK in 2010 when student protests where organized in several areas across the country). The average

Figure 6.2: Correlations between Protests and Public Claim Making - Environment



*all coefficients have p<0.01

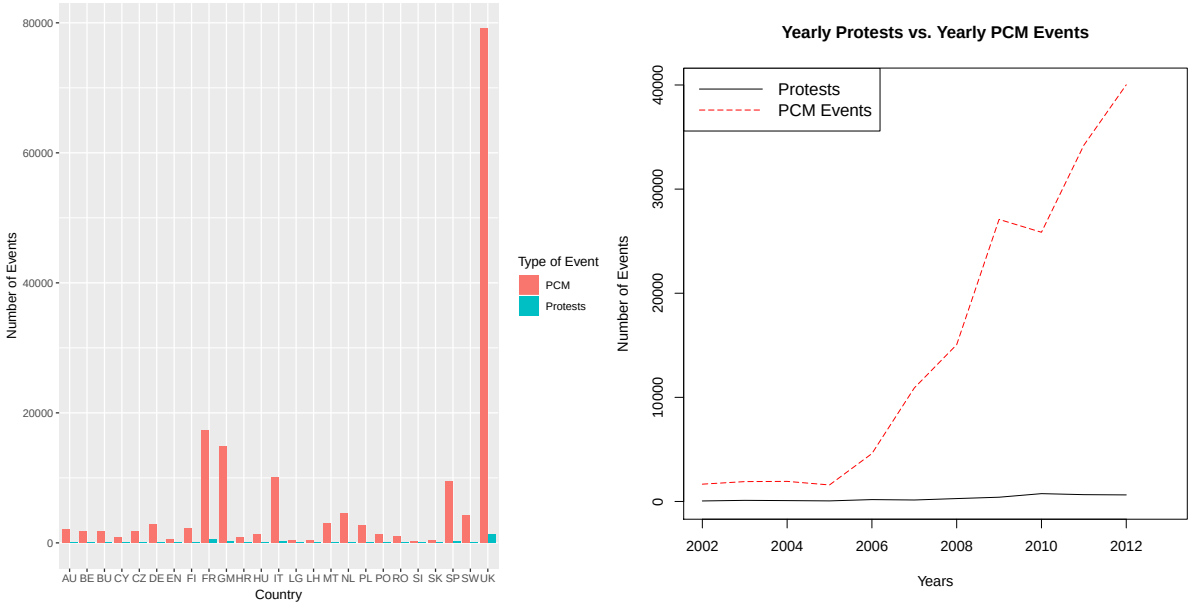
number of education protest events (about 12 per year) is, however, much lower than the average number of public claim making events in the same area (close to 600 events per year). In what regards how conflictual these events were, we can notice that protests were on average more conflictual than the public claim making events (-4.5 for protest events, compared to 0.7 for public claims, on a scale from -10 to 10), but also more conflictual than environmental protest events (-4.5 for education protest, compared to -2.3 for environmental protest). The media coverage and tone of protest events were on average also just slightly lower and less positive than for public claim making events. However, these were higher than for environmental protests, with an average of 4 news items for education protests (compared to 1.8 for environmental protest) and a media tone of 3.4 for education (compared to 1.3 for environment) on a scale for -100 to 100.

Table 6.2: Descriptive Statistics of Protest Events - Education

Statistic	N	Mean	St. Dev.	Min	Max
			Protest Events		
No. Events	275	12.1	37.4	0	371
Conflictual	275	−4.5	3.0	−7.5	0.0
Coverage	275	4.1	4.0	0.0	23.0
Tone	275	3.4	2.7	0.0	10.7
			Public Claim Making Events		
No. Events	275	599.3	1,972.8	0	17,951
Conflictual	275	0.7	1.1	−4.8	3.9
Coverage	275	5.4	2.0	0.0	12.8
Tone	275	5.9	1.1	0.0	8.8

In terms of yearly trends, the right graph in Figure 6.3 shows, unsurprisingly, that the yearly number of protest events is much lower than the yearly number of public claim making events. While public claim making events are experiencing an upward trend for the period included in the sample, the protest events trend appears more flat (which is also due to the large difference in range). The left graph in Figure 6.3 compares the number of

Figure 6.3: Protests vs. Public Claim Making - Education



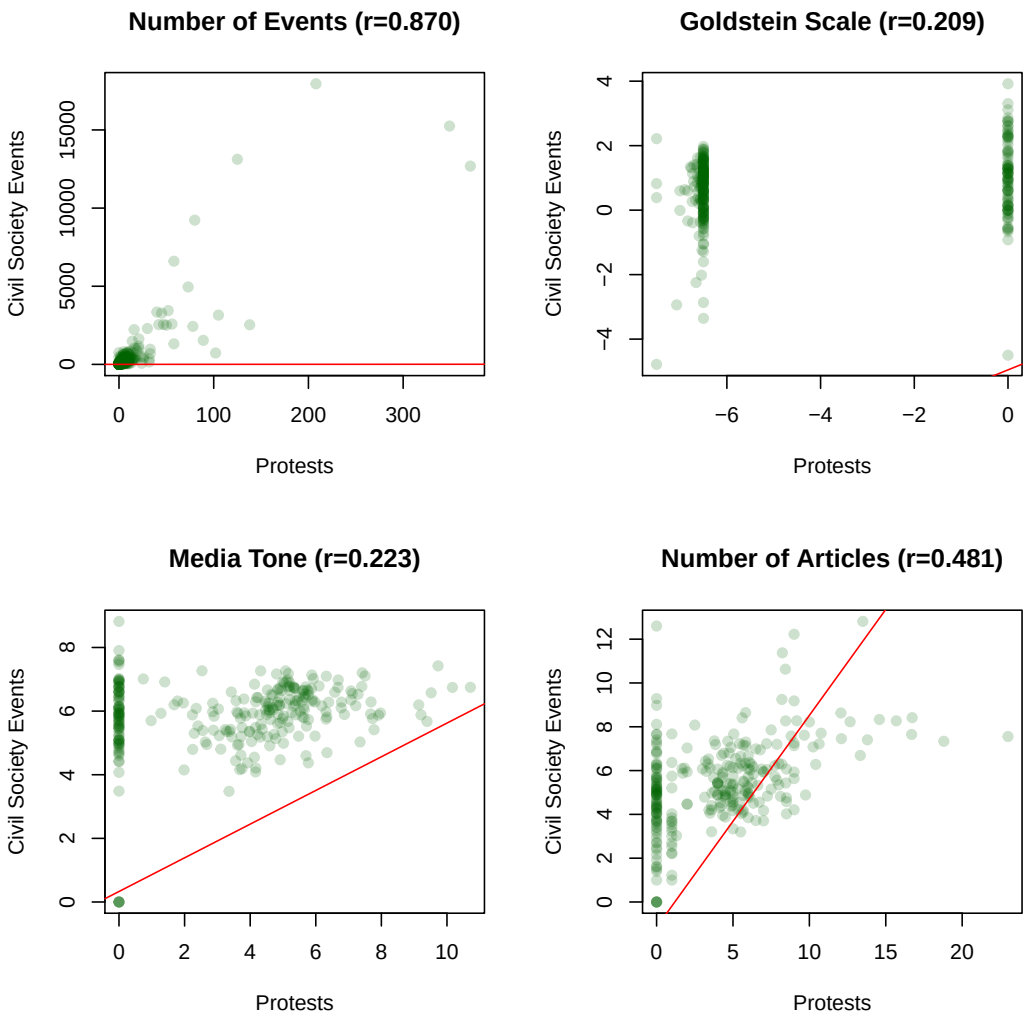
(a) Events by Country

(b) Events by Year

protest and public claim making events across all countries in the sample. Similarly as for the environmental issue area, countries with a higher number of public claims also tend to have a slightly higher number of protest events (e.g. UK, FR, GM, IT, SP). UK appears to have the highest number of events, both in the wider public claim making category and in the protest category. This might be due to a language bias in the GDELT data collection procedures. However, when analysing the impact of events on policy outputs, including fixed-effects for countries and looking mainly at within-country variation helps us overcome this bias (for yearly within-country trends in protest events see Figures C.4, C.5, and C.6 in Appendix C).

The correlation between the number of education protest events and education public claim making events appears to be significantly positive and also very strong (r=0.870, upper left plot in Figure 6.4). Thus, years in which countries had more public claim making events also tend to have more protest events. For the other three features of

Figure 6.4: Correlations between Protests and Public Claim Making - Education



*all coefficients have p<0.01

events, while the correlation coefficient appears significantly positive, the associations are weak or, at best, moderate with most of the cases falling far from the line of best fit.

6.3 Do Protest Events Matter for Policy Outputs?

The analysis of public claim making in Chapters 4 and 5 suggested that the number of such events has a positive impact on both policy outputs in the form of public expenditure and policy agendas. However, public claim making appeared to interact with both elite support and public opinion in different ways. Table 6.3 presents the results of the same model if it were to be restricted to only protest events.

For the environmental issue area, Model 1 with country fixed effects and without interactions suggests that no indicator, event or context related, has a significant effect on environmental public expenditure. Since most of the variation in expenditure is between countries, the model still shows a high coefficient of fit, explaining almost 85 per cent of the variance in the response variable (adjusted $R^2 = 0.848$), even if there is no significant predictor. While the amount of public claim making showed up as the only significant predictor of public expenditure for the environment in Chapter 4, the number of environmental protest events in our sample is too small (only 1 protest on average per year) to notice a similar effect for protest alone.

As far as education is concerned, in the model without interactions (3), protest events for education appear to significantly influence public expenditure, having an even larger effect size than public claim making, but at a lower level of confidence ($p < 0.1$). We can, thus, say that a single protest event increases education expenditure with 0.001 per cent of GDP on average. Additionally, the effective number of parties and country wealth appear significant in this model indicating again that having more parties and higher GDP leads to governments spending more on education in subsequent years. The reason for why

these results are more similar (than in the case of environment) to their corresponding public claim making results lies in the fact that the countries in the sample experienced more instances of education protests than environmental protests and that these were also highly correlated to public claims. In contrast, there were very scarce instances of environmental protests, which made it hard to show a connection to public expenditure.

When it comes to how protest events interact with public opinion and elite support, Model 2 for the environmental issue area and Model 4 for education show that no such interaction is supported. This is unsurprising since the previously found negative interaction effect between elite support and public claim making was supported in the environmental issue area. Here, in contrast, environmental protest does not seem to make a difference in terms of public expenditure in the first place. The lack of interactions between protest events and supportive actors in the education issue area is also unsurprising since no such interaction was found when analysing public claim making events either.

All in all, we can conclude that while there are quite some differences in the characteristics of protests events and those of public claim making in our sample, especially in terms of the range of the number of events, these differences didn't critically influence the results concerning policy output impact. If for the environmental issue area there were very few instances of protests in the data (one protest per year on average) which made it harder to notice a significant effect of this indicator on expenditure, for education the results mirror very closely those obtained using public claim making. Nevertheless, focusing only on protest demonstrations when trying to see how citizens can affect politics through alternative routes omits some of these channels that citizens undertake to make their voices heard. Therefore, the difference between using a wider range of public claim making activities compared to just protest events can be, in some cases, consequential when it comes to empirical results. This is especially noticed when dealing with periods, countries, or issue areas where instances of such protest events are few, as is the case for

the environmental issue area.

Table 6.3: Effects of Protest on Public Expenditure

	Public Env. Exp.		Public Edu. Exp.	
	(1)	(2)	(3)	(4)
	*fixed effects	*fixed effects & interactions	*fixed effects	*fixed effects & interactions
No.Protests	0.008	0.017	0.001*	−0.0005
	(0.006)	(0.011)	(0.0006)	(0.003)
Conflictual	0.005	0.006	0.022	0.022
	(0.005)	(0.007)	(0.018)	(0.018)
Coverage	−0.003	−0.003	−0.0004	−0.001
	(0.004)	(0.004)	(0.009)	(0.009)
Tone	0.004	0.005	0.025	0.026
	(0.010)	(0.010)	(0.017)	(0.017)
GDP/1000	0.002	0.002	0.037***	0.036***
	(0.002)	(0.002)	(0.013)	(0.013)
No.Parties	0.006	0.007	0.070***	0.068***
	(0.010)	(0.010)	(0.017)	(0.017)
Elite Supp.	−0.0001	−0.00003	0.00001	0.00002
	(0.0001)	(0.0001)	(0.0002)	(0.0002)
Public Op.	−0.002	−0.002	−0.004	−0.007
	(0.004)	(0.004)	(0.009)	(0.010)
Protest*Elite Supp.		−0.00002		−0.00000
		(0.00002)		(0.00000)
Protest*Public Op.		0.0002		0.0004
		(0.001)		(0.0005)
Constant	0.559***	0.545***	3.819***	3.874***
	(0.115)	(0.116)	(0.363)	(0.389)
Observations	214	214	197	197
R^2	0.871	0.872	0.928	0.929
Adjusted R^2	0.848	0.847	0.914	0.914
Residual Std. Error	0.124 (df = 180)	0.124 (df = 178)	0.314 (df = 164)	0.315 (df = 162)
F Statistic	36.949***	34.676***	66.436***	62.087***
	(df = 33; 180)	(df = 35; 178)	(df = 32; 164)	(df = 34; 162)

Note: *p<0.1; **p<0.05; ***p<0.01

6.4 Discussion

This chapter was dedicated to empirically analysing the differences between measuring collective mobilization through the wider array of public claim making forms or by restricting it to just protest events. It has been argued that focusing on protest alone does not allow capturing the entire repertoire, and therefore amount, of contention in an issue area. It is warranted then to ask what are the empirical consequences of this when it comes to studying the impact of collective mobilization on policy outputs.

Protest events in this chapter were identified by using the same GDELT data and keeping the initiator and target actor selection the same as for public claim making events. However, instead of allowing for any type of event in Table 2.2 to be part of the dataset, the type of events were restricted to just protest. This, expectedly, made the number of protest events much lower than that of public claim making events for the same issue area. Protest events were also different in their characteristics. These were more conflictual than public claim making events, they were less reported in the media, and they were usually reported with a less positive tone.

Despite these differences in their number and characteristics, protest events did not crucially differ from public claim making in terms of their impact on policy outputs when their number was large enough. Therefore, for the education issue area, where the number of protests correlates with public claim making and where there are enough instances of protest in the data, the results look similar to those obtained in Chapter 4. The environmental issue area, were the number of protests does not correlate with the amount of public claim making for this issue as there are very few instances of protests in the data (1 protest per year on average), departs from the pattern. Due to these low numbers, the previous impact of environmental claim making on public expenditure is not observed in the case of protest events.

All in all, we can conclude that protest events are not markedly different from public claim making events when it comes to influencing policy outputs. Nevertheless, for issue areas in which protest events are few, like the environment, it is hard to notice any significant difference in their broader impact on yearly public expenditure. Focusing only on protest, therefore, omits some of the channels that citizens undertake to make their voices heard and, therefore, underestimates the effect that collective mobilization has on policy outputs. Due to this, these disparate cases of protest events in certain issue areas constitute a better empirical terrain for case studies that focus on their effect on specific policy changes (or other goals), like many in the social movements outcomes literature so far. On the other hand, public claim making appears to be a better choice when studying broad temporal effects on broad policy outputs such as public expenditure.

Chapter 7

The Participation Consequences of Policy Change - A Vignette Experiment

7.1 Introduction and State of the Art

Scholars in the social movements' outcomes literature (Gamson, 1975; Kitschelt, 1986; Giugni et al, 1999; Giugni, 2004; Amenta et al, 2010) and the agenda-setting literature (Walgrave and Vliegenthart, 2012; Vliegenthart et al, 2016; Hutter and Vliegenthart, 2018) have previously looked at how collective mobilization (in the form of protest demonstrations and beyond) influences policy, among other consequences. The political opportunity structures literature embedded this question into context and inquired into the role of other factors in this relationship, such as political parties or public opinion. It, therefore, considered how these other features of the political environment facilitate or hinder movements' impact (e.g. Kriesi and Wisler, 1996; Kriesi, 2007). Previous empirical studies included in

this dissertation were embedded into this literature and aimed to examine how collective mobilization influences policy outputs and agendas, together with a host of contextual factors.

However, the reverse question of how policies affect mobilization in their turn has rarely been addressed. On the one hand, this could be considered "just" an issue of reverse causality to be handled through the modelling strategy, and studies usually deal with this by just lagging mobilization/participation variables before the policy variables (like done in the previous empirical studies in this dissertation). On the other hand, treating it simply as a reverse causality problem leaves us with plenty of unanswered questions. What participation responses does policy change prompt from citizens? Once citizens attain their goals or once they acquire certain collective benefits, do they just stop participating? These are important questions since policies could produce positive reinforcement effects on participation or could halt the dynamics between the two. Focusing on the reverse side of the coin in this relationship provides us with a better understanding not only on how and why people mobilize and the role that policy change and public opinion play in this process, but also on political issue priorities and how certain issue areas become prioritized and become more salient or contentious than others.

This chapter therefore aims at reversing the perspective of collective mobilization influencing policy and focuses on collective mobilization as the main dependent variable instead. Specifically, the chapter aims to examine how policy changes and public opinion across the same two issue areas (environment and education) influence political participation intentions in protest activities in their turn. In doing so, the chapter introduces original vignette experimental data collected in 7 EU countries as part of the POLPART ERC project. This section presents previous empirical studies that looked into how policies affect mobilization in their turn. Sections 7.2 and 7.3 describe the hypotheses tested and the experimental design of the study. After introducing the data and providing some descriptives of the

sample in Section 7.4, the results of the vignette experiment are discussed in Section 7.5.

While the idea of democratic responsiveness as a dynamic phenomenon characterized by both government responsiveness to public preferences, but also by public opinion responsiveness to policy change is widely acknowledged (Wlezien, 1995; Soroka and Wlezien, 2010), there has been little work about the effect of public policy on mobilization/participation and levels of contention surrounding particular issue areas in society at large. Scholars have complained that "political science has had little to say about the consequences of public policy outcomes for democratic citizenship" (Mettler and Soss, 2004, p.55), pointed to the lack of inquiry on whether "policies make citizens" (Campbell, 2005), and argued that even if the question of how outcomes affect movements dynamics in their turn has been raised long ago (Tilly, 1978), it has not yet been resolved (Suh, 2004). However, there is a small literature inquiring into these questions. For instance, Mettler and Soss (2004) found that the G.I. Bill increased political involvement among its participants by more fully incorporating them into the political system and promoting civic norms. Campbell (2005) found that social security policy had a significant effect on levels of political participation among senior citizens by giving them a personal stake in national politics. Thus, when threats of lower benefits or more restrictive eligibility requirements were made, participation increased among senior citizens which subsequently affected future policy outcomes. Kane (2010) looks at the influence of legal change on the number of gay and lesbian movement organizations in the US from 1974 to 1999 and shows that it can both increase and decrease mobilization depending on the context. Flavin and Griffin (2009) claim that one of the factors affecting participation in politics might be citizens' reactions to government policies and specifically whether those policies are consonant with their preferences. Using the 2000-2002-2004 National Election Studies (NES) panel they assess the extent to which change in citizens' political participation is linked to being a winner or loser on specific policy outcomes. They find that government decisions increase the participation of both the

biggest winners and the biggest losers. Specifically, policy winners' increased participation is attributable to a boost in their sense of political efficacy, while policy losers' increased participation is due to this group's dissatisfaction with current policies.

Despite these previous results, the process through which policies affect participation remains unclear and not fully understood. Therefore, the overall aim of this chapter is to further theorize and investigate the different ways in which policy change affects collective mobilization. In doing so it aims to look at both public policy and public opinion as the two main elements of previous models of democratic responsiveness (Stimson et al 1995, Wlezien 1995, Soroka and Wlezien 2010), but to complement these models with a third element, namely mobilization. Additionally, in obtaining a more complete picture on the phenomenon, the chapter aims to examine the effects of policy change and public opinion on a variety of mobilization/participation related variables going beyond just intentions to participate, but looking also at efficacy and approval of forms of mobilization.

In terms of the data used for examining these effects, Flavin and Griffin (2009) argue that the explanatory power of prior studies is limited by their frequent reliance on cross-sectional data. "The structure of such data does not allow researchers to tease out whether it is policy winning that influences participation or (as others have shown is also plausible) political participation that influences policy winning" (Flavin and Griffin, 2009, p. 545). For overcoming this issue, this study uses experimental data that allows manipulating different characteristics of policy change and public opinion though the use of vignettes (i.e. short descriptions of situations given to participants) and allow control over participants' characteristics through randomization. The design of the particular vignette experimental study is further described in Section 7.3.

7.2 Hypotheses

This chapter starts from the idea that people react to both policy change and to others' preferences (public opinion support), modifying their attitudes and intentions. In particular, it starts from the idea that policy change and public opinion support have different and opposite effects on intentions to participate, efficacy, approval of forms of mobilization, and preferences for policy.

In what regards policy change, while there hasn't been much research regarding its impact on participation intentions, the hypotheses used here are informed by previous studies looking into the impact of public policy on public opinion in general. While some regarded policy preferences as given and exogenous to the representation process (Kuklinski et al, 1995), others defied this idea of static policy preferences and stressed public opinion as endogenous, being formed and/or modified during the representation process. Studies in the later tradition often brought empirical evidence to the idea that policy change has a negative feedback relationship with public opinion, with the public sensing when the policy "temperature" drops or increases and adjusting its preferences and the signals it sends in the opposite direction (e.g. Wlezien 1995, Soroka and Wlezien 2010). In line with this thermostatic model of representation, I also hypothesize that policy change has a similar self-correcting effect on mobilization variables as it is said to have on public opinion. Namely, intentions for participation, but also efficacy, approval of forms of mobilization, and preference for policy, will also act as a thermostat decreasing as expenditure increases, and increasing as expenditure decrease (*the Thermostatic Hypothesis*). In other words, people would be less inclined to mobilize once benefits are obtained. They would also want less of what they already obtained, hence preferences for further gains should be decreased. Additionally, they would be less approving of further mobilization forms on the same issue and would consider these as less efficacious since such actions could be

considered superfluous as they already (partially) achieved benefits. This hypothesis should also work in the opposite direction, with the exception of efficacy which is expected to drop as benefits are taken away. Therefore, as expenditure for an issue decreases, people will intend to participate more, they will be more approving of other forms of participation, and their preference for spending on that issue will increase.

Additionally, in line with suggestions put forward by Flavin and Griffin (2009), this study also looks at the speed of policy change, hypothesizing that this thermostatic effect is stronger when policies are changed abruptly, then when policies are changed incrementally (*the Speed Hypothesis*). The idea behind this hypothesis is that abrupt change can be more noticeable than incremental change and can also seem more consequential as it leaves no time for adjustment to the new state. Finally, I also hypothesize that the type of participation action in which people engage also matters as people will be even more deterred from participating in more "costly" actions (such as demonstrations) when policy is already favourable (*the Action Cost Hypothesis*). In other words, people are expected to be even less ready to pay the "cost" of participation as this "cost" increases (e.g. time, physical effort, etc.) and as policies are more favourable.

In terms of public opinion, I hypothesize that when public opinion for an issue area is favourable, people are more inclined to participate in that issue area, to approve of further actions in that issue area, and to have preferences for further expenditure in that issue area due to a social desirability bias (*the Social Desirability Hypothesis*). While such social desirability biases are usually studied in how participants tend to give survey responses that are believed to be more socially acceptable (Callegaro, 2008), here I hypothesize that the same logic applies to people's attitudes and intentions for political participation when being told what the general public preferences are. Respondents will adjust their intentions to participate, approval of participation forms, and preferences for policy to be closer to those of the general public opinion presented to them. Finally, apart from this

social desirability effect, I also expect public opinion to influence the efficacy of different participation forms (e.g. demonstrations, petitions). Therefore, when public opinion for an issue area is favourable, people are more inclined to see (further) participation actions as efficacious since these are backed by a majority of the public and, therefore, have more of leverage on politicians (*the Backup Efficacy Hypothesis*).

The effects of policy change:

Thermostatic Hypothesis: When expenditure for an issue area increases, intentions to further participate in that issue area, perceived efficacy of further actions in that issue area, approval of further actions in that issue area, and preferences for further expenditure in that issue area decrease. When expenditure for an issue area decreases, intentions to further participate increase, approval of actions increases, and the preferences for further expenditure increase. When expenditure decreases, efficacy should decrease as well.

Speed Hypothesis: The above effects are of larger magnitude when the policy change is abrupt, than when the policy change is incremental.

Action Cost Hypothesis: The thermostatic effect is of larger magnitude when it comes to higher cost participation forms (i.e. demonstrations vs. petitions).

The effects of public opinion:

Social Desirability Hypothesis: When the majority of public opinion is supportive of an issue area, intentions to further participate in that issue area, approval of further actions in that issue area, and preferences for further expenditure in that issue area are higher. When a minority of public opinion is supportive, intentions to further participate in that issue area, approval of further actions in that issue area, and preferences for further

expenditure in that issue area are lower.

Backup Efficacy Hypothesis: When the majority of public opinion is supportive of an issue area, the perceived efficacy of further actions in that issue area is perceived as being higher. When a minority of public opinion is supportive, the perceived efficacy of further actions in that issue area is lower.

7.3 Experimental Design

7.3.1 Vignette Studies

To study the effects of policy change and public opinion, I will use vignette experiments, a form of survey experiments widely used in psychological and sociological research. These are ideal for my purposes as they enable controlled studies of attitudes, behaviours, or mental processes that would be difficult to study through observational studies. Vignette experiments consist of presenting participants with carefully constructed and realistic scenarios that allow for the manipulation and control of factors, in my case policy change and public opinion support, to assess dependent variables including individuals' intentions, attitudes, and behaviours. They further achieve the internal validity of classic experimental studies, while enhancing the external validity of these by affording the same sampling strategies as those of surveys (Aguinis and Bradley, 2014).

7.3.2 Experimental Design

For the experimental vignettes used here participants were presented with situations in which expenditure for the environment and education, and public opinion support for the same issue areas are manipulated. Changes in political participation intentions, efficacy, and preferences for policy were afterwards measured. For doing so, the vignette experi-

Table 7.1: Vignette Manipulations

Manipulations	**Levels**
M1: Public Opinion Support	no manipulation a majority a minority
M2: Issue	environment education
M3: Policy Change Direction	no manipulation (After large demonstrations)...to increase (Despite large demonstrations)...to decrease
M4: Abrupt/Incremental (when M3 is not blank)	immediately over the course of the next 5 years

ments consisted of several stages. Firstly, participants were assigned randomly with short descriptions (vignettes) in which they will read about situations describing a certain combination of public opinion support, expenditure change direction, and policy change speed in a specific issue area (see InfoBox 7.1). Manipulating these factors resulted in a 3 (public opinion) by 2 (issues) by 2 (policy change direction) by 2 (policy change speed) + 1 (no policy change) = 30 universe of vignettes which was randomly assigned to participants (see Table 7.1). Secondly, post-manipulation measures of political participation intentions, efficacy, approval of actions, and preference for policy regarding the same issue areas were taken (see InfoBox 7.2). Finally, manipulation checks were added, which serve for checking whether the manipulations of public policy and public opinion were successful and whether participants managed to read and understand properly the short descriptions they were assigned (see InfoBox 7.3).

InfoBox 7.1: Vignette Text

Vignette Text:
Please read the following text carefully and then answer the questions based on the text. Try to imagine the following situation:
A public opinion poll shows that...
M1:
- a majority
- only a minority
- blank (whole sentence removed)

...of the country population considers public spending on
M2:
- the environment
- education

...a top priority in the government budget. However, (if M1 = minority)/Additionally, (if M1 = majority)/blank (if M1 = blank) there have been demonstrations demanding that the government spends more money on the environment/education (as in M2).
M3:
- After these demonstrations the government has decided to increase
- Despite these demonstrations the government has decided to decrease

...the budget for environmental protection/education (as in M2)
M4:
- immediately.
- gradually, over the next five years.

7.4 Data and Methods

7.4.1 The Data

The data for this chapter were collected through an online survey experiment funded by the POLPART ERC project, out of which this particular vignette was part. The data were collected in July, August, and September 2017 among 8,529 respondents from seven countries: the Netherlands, Germany, Switzerland, the United Kingdom, Hungary, Romania, and Greece[1], using the international data collecting company Kantar TNS. The entire on-

[1]Additional data was also collected for Brazil and Argentina. However, in line with the rest of the dissertation, the results presented here are restricted to EU countries.

InfoBox 7.2: Follow-up Questions - Dependent Variables

Follow-up questions:
Please answer the following questions with the described situation in mind.
(Intentions to Participate)

1. *In this situation, if more actions for a better education/environment would be organized, how likely is it that you would participate in the following ones? (0 = very unlikely, 10 = very likely)*
    - Petition drive for better education/for a better environment (DV1)
    - Street demonstration for better education/for a better environment (DV2)

(Efficacy)

1. *In this situation, if more actions for a better education/environment would be organized, how likely do you think it is that the following actions would make a difference? (0 = very unlikely, 10 = very likely)*
    - Petition drive for better education/for a better environment (DV3)
    - Street demonstration for better education/for a better environment (DV4)
2. *In this situation, if more actions for a better education/environment would be organized, how likely do you think it is that your own participation in the following actions would make a difference? (0 = very unlikely, 10 = very likely)*
    - Petition drive for better education/for a better environment (DV5)
    - Street demonstration for better education/for a better environment (DV6)

(Approval of actions)

1. *In this situation, if more actions for a better education/environment would be organized, how much would you approve of the following actions in favour of environmental/educational issues? (0 = not likely at all - 10 = very likely)*
    - Petition drive for better education/for a better environment (DV7)
    - Street demonstration for better education/for a better environment (DV8)

(Policy Preference)

1. *In your opinion, how much priority should the government give to spending on education/environment? (0 = very low priority) - 10 = very high priority) (DV9)*

InfoBox 7.3: Manipulation Checks

Manipulation Checks:

1. How much in favour of spending on education/the environment do you think the population in (country) is? (0 = not at all in favour 10 = very much in favour) (CHECK1)

2. How much in favour of spending on education/the environment do you think the government in (country) is? (0 = not at all in favour 10 = very much in favour) (CHECK2)

3. How fast does it take the government in (country) to implement decisions related to education/the environment? (0 = not at all fast 10 = very fast) (CHECK3)

line survey involved five experimental studies and an online self-completion questionnaire. Therefore, each participant was randomly assigned to only about half of the experimental studies, and for each participant the studies were randomized in between themselves in order to minimize potential systematic biases induced by one study to the other. Out of the 8,529 subjects on whom data was collected, the particular vignette study discussed in this chapter was assigned randomly to slightly less than half of them, ending up with a sample of 3,290 subjects.

Since nationally representative samples with online collected data are virtually impossible to achieve due to Internet penetration rates, the POLPART project aimed for stratified samples in all countries using comparable quotas. Therefore, the online survey was given to subjects aged 18 to 65 year old in each country, selected using quotas for gender (50% female), age (40% 18-34 years; 45% 35-49 years; 15% 50-65 years), education (10% at most lower secondary education; 50% medium level education; 40% advanced vocational or university education), and employment (70% employed). Firstly, while representative samples would always be more desirable than quota samples, they are not as problematic for vignette experiments as for other type of studies as long as experimental treatments are randomly assigned (Auspurg and Hinz, 2014). Additionally, the sample used here, constitutes an improvement to the usually employed "student" or other convenience samples used in social science experiments due to its relatively bigger size and diversity of respondent characteristics.

Table 7.2 presents the distribution per country of subjects who were assigned and who were not assigned to the experimental vignette. We can see participants are fairly equally distributed, with Romania having the lowest number of participants, 345, while Greece having the highest number, 672. The gender distribution of the subjects who participated in the vignette is also fairly balanced, with 1653 subjects being male and 1637 subjects female. The study's aimed distribution in terms of age group and education level was also

maintained among those who were selected for the vignette, with the 50 to 65 year-old group and the low education group, which had a lower quota, being less represented than the other groups (see Table 7.3).

Since the vignette used in this study was particularly concerned with political participation regarding the environment and the education issue areas, the self-completion questionnaire also included questions about the participants' issue priority and previous participation behaviour. Table 7.3, show that while 25.05% of the vignette participants considered education should be among the top three most important issues in their country, only 16.78% said the same thing about the environment. In terms of participation, more than half the sample had signed a petition before (54.29), while only a quarter participated in a public demonstration (22.55). Interest in politics, satisfaction with democracy and left-right self-placement were also measured, among other things, with subjects having responses towards the middle of the scales for all three (see Table 7.4). Respondents scored on average 2.66 on a scale from 1 to 4 in terms of political interest, they were 4.28 on a scale from 0 to 10 in terms of satisfaction with democracy, and placed themselves on average at about 5.20 on a scale from 0 (left) to 10 (right).

The 3,290 participants that were given the vignette study were randomly assigned to one of the 30 factor combinations introduced above, resulting in a fairly balanced treatment assignment (see Table 7.5 and Table 7.6). The public opinion support, the policy change direction, and the policy change speed manipulations were each given to roughly a third of the sample. However, policy change speed manipulation levels "incremental" and "abrupt" were only assigned to where the policy change direction was specified ("decrease" and "increase"), the blank control group for these factors coinciding. Around half the sample was given the version of the vignette referring to environmental expenditure, while the other half got the version referring to education.

Table 7.2: Country Distribution of Subjects

	Vignette		
Country	No	Yes	Sum
Netherlands	721	401	1122
Germany	749	361	1110
UK	737	517	1254
Switzerland	694	618	1312
Hungary	730	376	1106
Romania	741	345	1086
Greece	867	672	1539
Sum	5239	3290	8529

7.4.2 Methodology

Since the follow-up questions given to the participants after the presentation of the vignettes are all related conceptually, referring to political participation in the form of petitions and demonstrations for environment/education and to preferences for policies in these areas, we can take a multivariate approach and treat this case as a case in which we have multiple related dependent variables. Therefore, the analyses presented here use multivariate analysis of variance (MANOVA), which is an extension of ANOVA for several dependent variables. The main objective in using MANOVA is to determine whether the manipulation of the independent variables and the interaction of these manipulations produce a difference in the combined dependent variables. After checking whether the assumption of MANOVA are respected and whether the manipulations were noticed by the participants, I present the main MANOVA results followed up by Tukey Honest Significant Differences (HSD) post-hoc tests aimed at looking at which specific groups differed in terms of which specific dependent variable.

Multivariate Normality: If the samples are sufficiently large, then the Multivariate Central Limit Theorem holds and we can assume the multivariate normality assumption holds. Additionally, MANOVA is not very sensitive to violations of multivariate normality

Table 7.3: Characteristics of Subjects I

Statistic		Count	%
Sex	Male	1653	50.24
	Female	1637	49.76
Age group	age 18 -34	1199	36.44
	age 35 - 49	1475	44.83
	age 50 - 65	616	18.72
Edu. Group	low	301	9.18
	middle	1699	51.81
	high	1279	39.01
Edu. Priority	No	2466	74.95
	Yes	824	25.05
Env. Priority	No	2738	83.22
	Yes	552	16.78
Ever Petition	No	1504	45.71
	Yes	1786	54.29
Ever Demonstrate	No	2548	77.45
	Yes	742	22.55

Table 7.4: Characteristics of Subjects II

Statistic	N	Mean	St. Dev.	Min	Max
Left-Right Scale	3,290	5.202	2.212	0	10
Satisfaction with Democracy	3,290	4.284	2.711	0	10
Interest in Politics	3,290	2.669	0.901	1	4

provided there aren't any (or at least many) outliers. Since our sample is large enough, with each combination of factors (cell) in Table 7.5 having at least 157 participants, I consider multivariate normality to hold.

Outliers: While the extremes of the scale on which the DVs are measured, namely values of 1 and 11, can be found in each of the treatment combinations, these are not considered or treated as outliers since they constitute quite a large part of the sample. The histograms in Figure 7.1 show the frequency of each value in the 1 to 11 scale for each

Table 7.5: Manipulation Assignment

		Policy Change Direction & Speed		
Pub.Op.	Issue	blank	decrease	increase
blank	environment	169	199 *(100 abrupt)*	185 *(94 abrupt)*
	education	165	176 *(79 abrupt)*	168 *(83 abrupt)*
minority	environment	172	202 *(105 abrupt)*	185 *(91 abrupt)*
	education	197	187 *(93 abrupt)*	174 *(100 abrupt)*
majority	environment	213	157 *(78 abrupt)*	176 *(94 abrupt)*
	education	189	189 *(87 abrupt)*	187 *(102 abrupt)*

dependent variable in the entire sample. It can be seen that extreme values on the scale are popular among respondents.

DVs Correlated and Collinearity: The dependent variables are all significantly and moderately positively correlated to each other, with Pearson correlation coefficients ranging from .382 (DV9- "priority should the government give to spending" & DV5- "my participation in dem. would make a difference") and .820 (DV4- "a petition would make a difference"; DV6- "my signing of a petition would make a difference") (all coefficients were statistically significant with a $p < 0.01$). Since none of the values of the correlation coefficients were greater than .9, we can consider the collinearity assumption respected.

Homogeneity of covariance matrices: I use Levene's test of Equality of Error Variances. For all dependent variables the null hypotheses of equality of covariance matrices is not rejected (except for DV1: "participate in a dem."). However, this test is sensitive to large data files, meaning that when there are a large number of cases, it can detect even small departures from homogeneity. MANOVA is not so sensitive to violations of this assumption provided the covariance matrices are not too different and the sample sizes are of fairly equal sizes. In this case, the sample sizes here are fairly equal having between 157 and 213 subjects (Table 7.5), except for when we take policy change speed into account. However, this manipulation was not used as it appears to not have been noticed by participants.

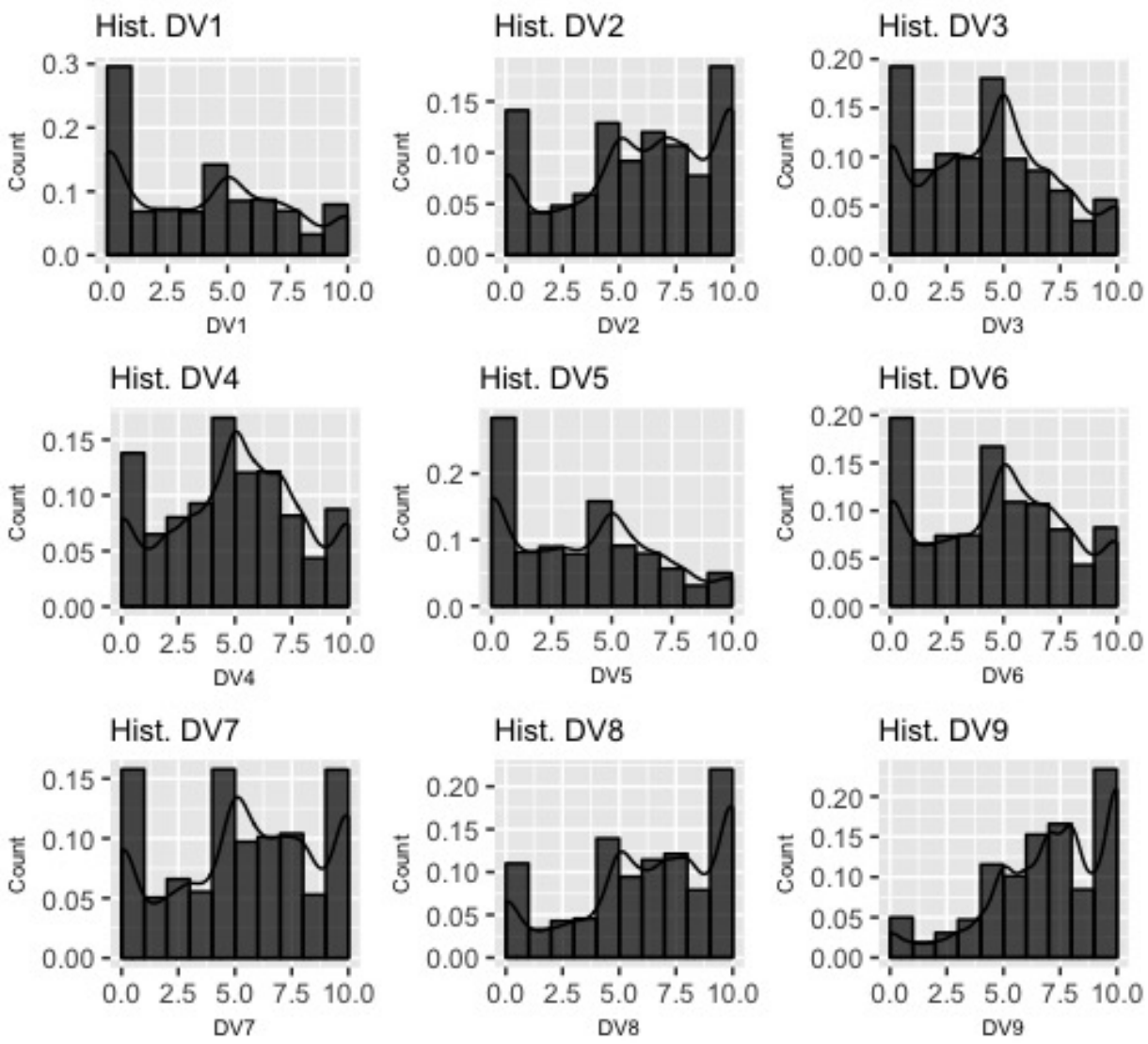


Figure 7.1: Histograms of the Dependent Variables

Where: DV1: "participate in dem."; DV2: "sign a petition"; DV3: "a dem. would make a difference"; DV4: "a petition would make a difference"; DV5: "my participation in dem. would make a difference"; DV6: "my signing of a petition would make a difference"; DV7: "approve of a dem."; DV8: "approve of a petition"; DV9: "priority should the government give to spending";

7.5 Results

7.5.1 Manipulation Checks

The three manipulation check questions following up the vignette were introduced for testing whether the respondents noticed and/or paid attention to the situation described to them. For example, if they noticed the public opinion support manipulation (blank/a minority/a majority), there should be significant differences in their assessment of how supportive the public opinion in the situation presented is at the end of the vignette. Table 7.6 presents the results of each manipulation check.[2] While public opinion support and direction of policy change appear to have a significant effect on their respective assessment questions, speed appears to have not. In other words, there is not a significant difference in how fast people think it takes the government to implement the decision between the group that had an abrupt change specified ("immediately") and the group that had an incremental change specified ("over the course of the next 5 years"). Because this manipulation appears to have not been noticed by the respondents, it will be omitted in the results further presented and the Speed Hypothesis will not be assessed[3].

7.5.2 Overall MANOVA Results

The results of a three-way MANOVA on the nine dependent variables are presented in Table 7.7. While there is no statistically significant 3-way or 2-way interaction effect between the three factors included, each factors appears to have a significant effect on the

[2]The sample sizes for the manipulation checks are smaller than the overall sample size because the manipulation check questions, in contrast to the vignette follow-up questions, were not mandatory for the participants.

[3]Results including the Policy Change Speed manipulation are presented in Appendix D. These do not differ from the ones presented here

Table 7.6: Manipulation Checks

	Dependent variable:		
	Check (1)	Check (2)	Check (3)
Pub.Op.	0.643***		
	(0.107)		
Pol. Dir.		0.879***	
		(0.110)	
Speed			0.174
			(0.112)
Constant	5.568***	3.978***	4.146***
	(0.076)	(0.077)	(0.079)
Observations	2,228	2,185	2,185
R^2	0.016	0.028	0.001
Adjusted R^2	0.015	0.028	0.001
Residual Std. Error	2.533 (df = 2226)	2.580 (df = 2183)	2.608 (df = 2183)
F Statistic	35.904*** (df = 1; 2226)	63.433*** (df = 1; 2183)	2.422 (df = 1; 2183)
Note:			*p<0.1; **p<0.05; ***p<0.01

combined dependent variables on its own (F=1.8, $p < 0.05$ for public opinion support, F=1.96, $p < 0.01$ for direction for policy change, and F=12.03, $p < 0.001$ for issue). [4]

Since we don't have interaction effects, the MANOVA analysis will be followed by Tukey's Honest Significant Differences post-hoc tests. These examine the effect of each of the three factors on each of the nine dependent variables in order to see more specifically which manipulation influenced which dependent variable. Below I report the effects of the level of the factors on the dependent variables that were found significant.

[4]Analyses including the Policy Change Speed Manipulation which didn't pass the manipulation check were also performed and can be seen in Appendix D. The results are similar to the ones presented here, in that each of the three other treatments have a significant independent effect on the combined dependent variables, without any interaction effect. Policy Change Speed didn't have a significant effect.

Table 7.7: MANOVA results

	Df	Wilks	approx F	num Df	den Df	Pr(>F)
Pub.Op.	2	0.990	1.800	18	6,528	0.020***
Pol.Dir.	2	0.990	1.960	18	6,528	0.010***
Issue	1	0.970	12.030	9	3,264	0***
Pub.Op.*Pol.Dir.	4	0.990	0.800	36	12,233	0.800
Pub.Op.*Issue	2	1	0.440	18	6,528	0.980
Pol.Dir.*Issue	2	1	0.580	18	6,528	0.910
Pub.Op.*Pol.Dir.*Issue	4	0.990	0.820	36	12,233	0.770
Residuals	3,272					

Note: *p<0.1; **p<0.05; ***p<0.01

7.5.3 The Effect of Issue Area

Firstly, issue area appeared to have a significant effect on all nine dependent variables measured (see Table 7.8 and Figure 7.2). Unsurprisingly, respondents reported an overall preference for the education issue area, considering that the government should give more priority to education with about 0.85 points on average ($p < 0.001$) on a 0 to 10 scale. Respondents' intentions to participate in future petitions or demonstrations were significantly higher for education than for the environment (with 0.38, $p < 0.001$ for demonstrations, and 0.42, $p < 0.001$ for petitions on a 0 to 10 scale for both actions). Additionally, respondents also considered petitions and demonstrations more efficacious when in favour of education compared to when in favour of the environment (0.25 and 0.27, $p < 0.01$ on a 0-10 scale). Feeling of personal efficacy (internal efficacy) also significantly differed between the issue areas, with people feeling on average with 0.15 (demonstrations)/0.20 ($p < 0.1$, petitions) more efficacious in actions related to education. Finally, respondents also approved more of petitions and demonstrations when these were supporting education (with about 0.3, $p < 0.01$ for both actions).

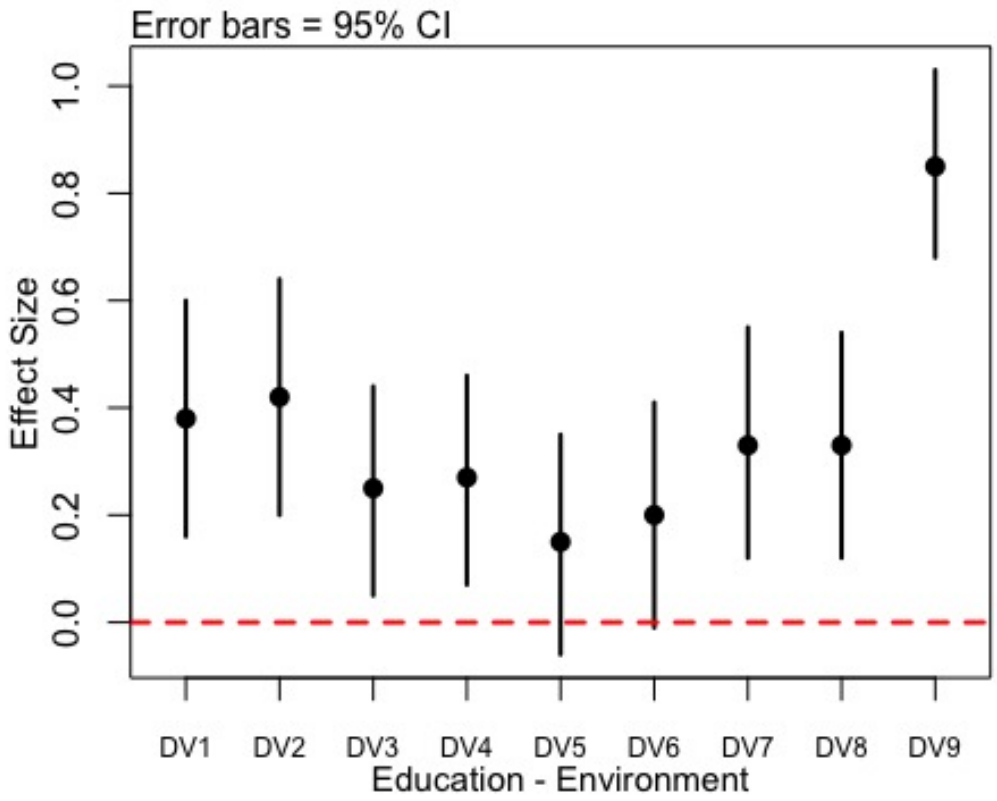


Figure 7.2: The Effects of Issue Area

Where: DV1: "participate in dem."; DV2: "sign a petition"; DV3: "a dem. would make a difference"; DV4: "a petition would make a difference"; DV5: "my participation in dem. would make a difference"; DV6: "my signing of a petition would make a difference"; DV7: "approve of a dem."; DV8: "approve of a petition"; DV9: "priority should the government give to spending";

Table 7.8: The Effects of Issue Area

	Edu.-Env.	*95% C.I.*		
	M.Diff.	Lower	Upper	P-val.
DV1: "participate in dem."	0.380	0.160	0.600	0***
DV2: "sign a petition"	0.420	0.200	0.640	0***
DV3: "a dem. would make a difference"	0.250	0.050	0.440	0.012**
DV4: "a petition would make a difference"	0.270	0.070	0.460	0.007***
DV5: "my participation in dem. would make a difference"	0.150	−0.060	0.350	0.167
DV6: "my signing of a petition would make a difference"	0.200	−0.010	0.410	0.061*
DV7: "approve of a dem."	0.330	0.120	0.550	0***
DV8: "approve of a petition"	0.330	0.120	0.540	0***
DV9: "priority should the government give to spending"	0.850	0.680	1.030	0***

Note: *p<0.1; **p<0.05; ***p<0.01

7.5.4 The Effect of Policy Change

The direction of policy change significantly influenced the combined dependent variables as well. Table 7.9 and Figure 7.3 report the results of the post-hoc tests in order to see which manipulation of policy change had effect on which dependent variable. The results suggest that not having any policy change specified versus having specified an increase in the budget for environment or education decreases not only intentions to sign a petition, but also feelings of efficacy regarding it. Knowing that the government will increase the environment/education budget made respondents less eager to participate in petition signing by 0.33 ($p < 0.05$) on a 0 to 10 scale measuring future participation intentions. Additionally, it made people consider future petitions as being less efficacious by 0.31 ($p < 0.1$) on the same 0-10 scale. Finally, it also decreased preferences for policy measured through the preferred priority which the government should give to spending by .32 ($p < 0.01$) on average on a 0-10 scale.

This suggests that favourable policy change has the thermostatic effect hypothesized. This means that citizens' preferences act as a thermostat and once they see favourable policies their preferences and intentions for further participation regarding those policies

decrease. However, the results suggest that this phenomenon happens only in the case of increased expenditure (favourable policy) and not in the case of decreased expenditure (unfavourable policies), indicating that the thermostatic effect might function in only one direction and produce corrections only in the case of "too" much spending. Additionally, the effects of policy change were only noticed regarding petitions and not demonstrations, suggesting that intentions to participate in higher cost actions such as demonstrations are not significantly affected by increases or decreases in the budget, going against the Action Cost Hypotheses. This suggests that intentions to take part in and efficacy of "higher cost" actions are not affected by policy change, but are rather driven by other factors.

One such factor that might drive participation in higher cost actions such as demonstrations is having already taken part in such an action. Table 7.10 and Figure 7.4 shows the effects of having demonstrated before on intentions to demonstrate in the future, efficacy and approval of demonstrations as measured within the vignette. Demonstrating before significantly affects all the demonstration related variables ($p < 0.01$), making participants more eager to demonstrate in the future by 2.56 points on average on a 0-10 scale. Additionally, participants also considered demonstrations more efficacious by 1.44, considered their own participation to be more efficacious by 1.81, and approve of demonstrations by 2.14 points on average on the same 0-10 scale. This exemplifies that participation in higher cost actions such as demonstration in significantly driven by previous participation behaviour, among other factors, while policy change plays an insignificant role in this. Nevertheless, analysing a comprehensive list of the determinates of participation intentions in "higher cost" actions (such as resource availability, previous experience of participation, etc.) exceeds the purpose of this study.

Table 7.9: The Effects of Policy Change

			95% C.I.		
		Mean. diff.	Lower	Upper	P-val.
DV2: "sign a petition"	Decrease-Blank	-0.165	-0.485	0.155	0.446
	Increase-Blank	-0.334	-0.656	-0.012	0.04**
	Increase-Decrease	-0.169	-0.491	0.153	0.437
DV4: "a petition would make a difference"	Decrease-Blank	-0.163	-0.45	0.123	0.373
	Increase-Blank	-0.312	-0.601	-0.024	0.03**
	Increase-Decrease	-0.149	-0.437	0.139	0.447
DV6: "my signing of a petition would make a difference"	Decrease-Blank	-0.038	-0.342	0.266	0.953
	Increase-Blank	-0.292	-0.598	0.015	0.066*
	Increase-Decrease	-0.253	-0.56	0.053	0.128
DV9: "priority should the government give to spending"	Decrease-Blank	-0.208	-0.467	0.051	0.144
	Increase-Blank	-0.326	-0.587	-0.064	0.009***
	Increase-Decrease	-0.118	-0.379	0.143	0.54

Note: *p<0.1; **p<0.05; ***p<0.01

Table 7.10: The Effects of Demonstrating Before

	Dependent variable:			
	DV1: "participate in dem."	DV3: "a dem. would make a difference"	DV5: "my participation in dem. would make a difference"	DV7: "approve of a dem."
Ever Demonstrate	2.560***	1.449***	1.816***	2.141***
	(0.128)	(0.117)	(0.122)	(0.129)
Constant	3.601***	4.094***	3.544***	5.037***
	(0.061)	(0.055)	(0.058)	(0.061)
Observations	3,290	3,290	3,290	3,290
R^2	0.109	0.045	0.063	0.077
Adjusted R^2	0.109	0.044	0.063	0.077
Residual Std. Error (df = 3288)	3.062	2.801	2.922	3.088
F Statistic (df = 1; 3288)	401.587***	153.902***	221.967***	276.066***

Note: *p<0.1; **p<0.05; ***p<0.01

Table 7.11: The Effects of Public Opinion

			95% C.I.		
		Mean. diff.	Lower	Upper	P-val.
DV1: "participate in dem."	Minority-Blank	-0.331	-0.657	-0.005	0.045**
	Majority-Blank	-0.157	-0.484	0.169	0.495
	Majority-Minority	0.174	-0.148	0.496	0.415
DV9: "priority should the government give to spending"	Minority-Blank	0.074	-0.187	0.336	0.782
	Majority-Blank	0.244	-0.018	0.506	0.075*
	Majority-Minority	0.169	-0.09	0.428	0.276

Note: *p<0.1; **p<0.05; ***p<0.01

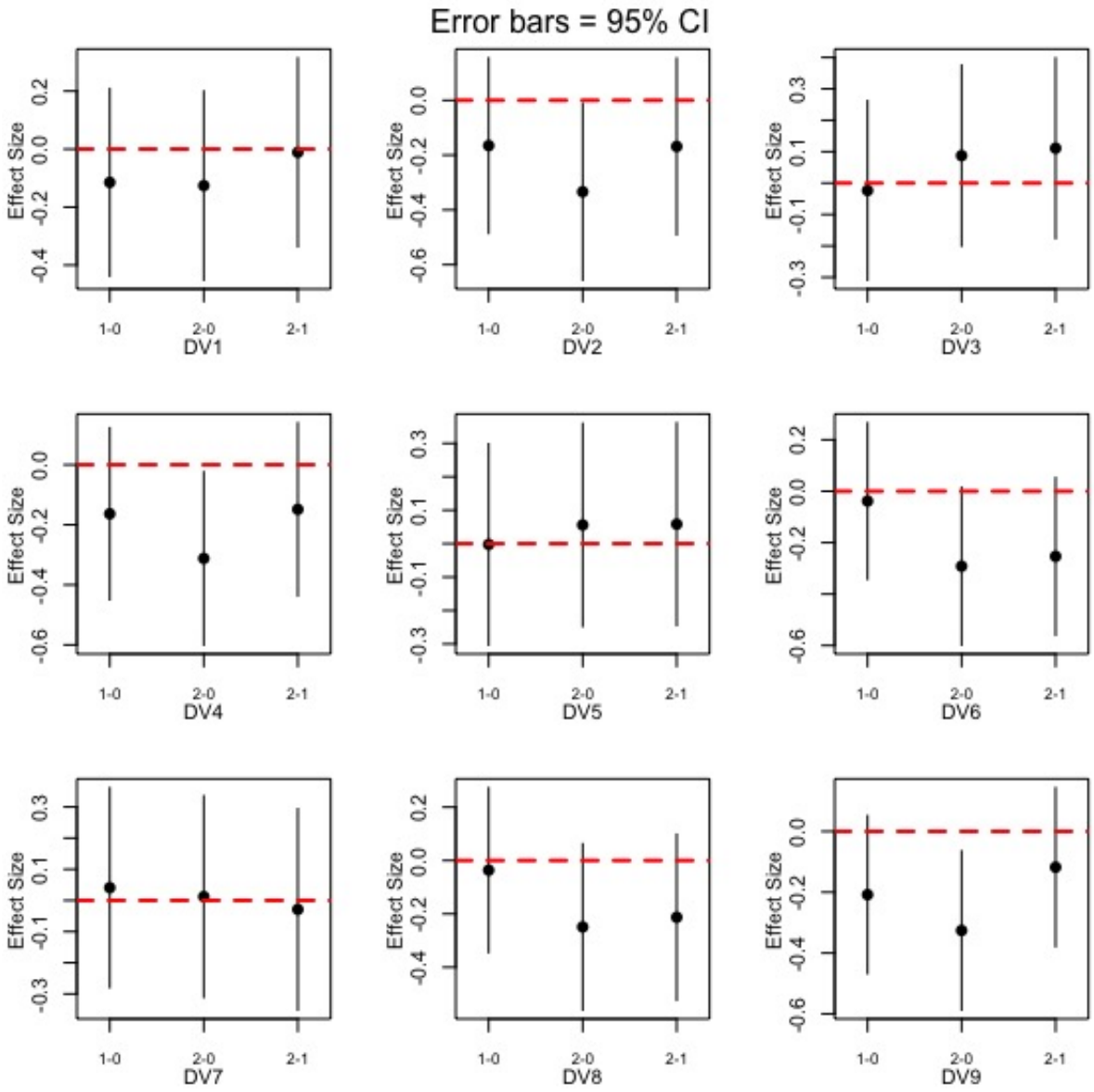


Figure 7.3: The Effects of Policy Change

Where: DV1: "participate in dem."; DV2: "sign a petition"; DV3: "a dem. would make a difference"; DV4: "a petition would make a difference"; DV5: "my participation in dem. would make a difference"; DV6: "my signing of a petition would make a difference"; DV7: "approve of a dem."; DV8: "approve of a petition"; DV9: "priority should the government give to spending";

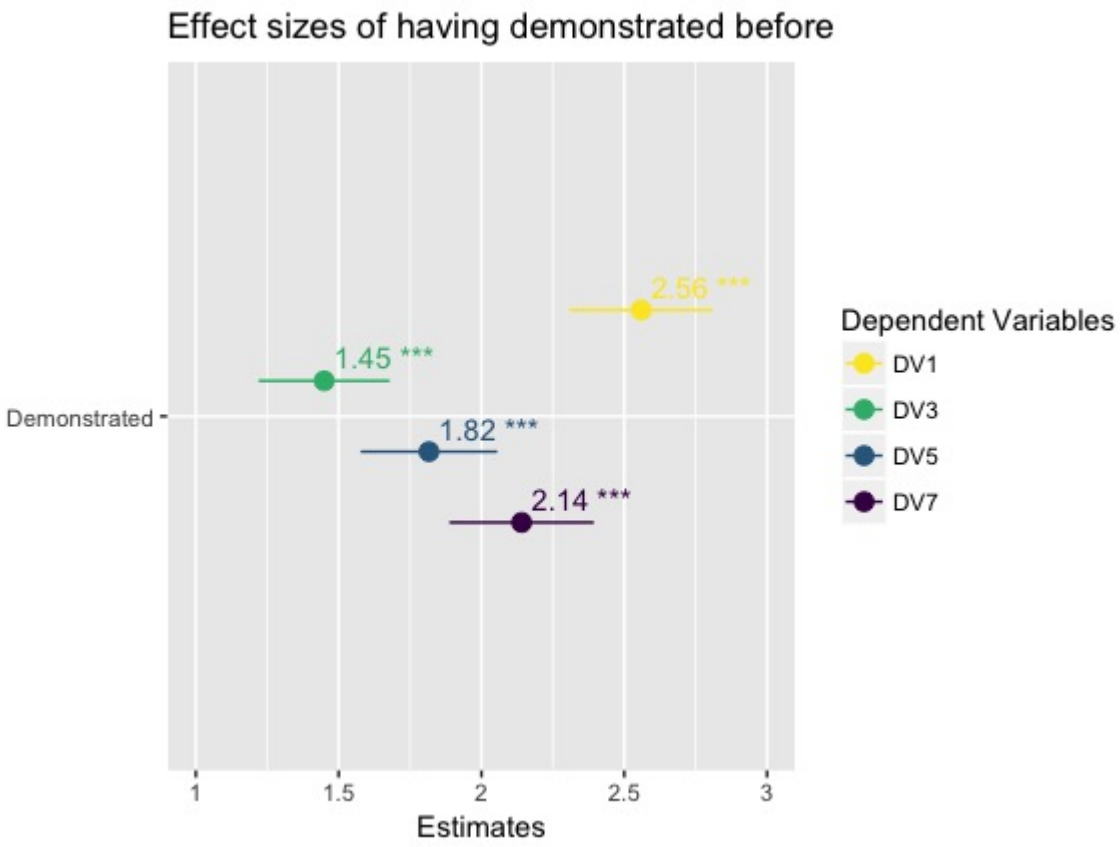


Figure 7.4: The Effects of Demonstrating Before

Where: DV1: "participate in dem."; DV3: "a dem. would make a difference"; DV5: "my participation in dem. would make a difference"; DV7: "approve of a dem.";

7.5.5 The Effect of Public Opinion

In the post-hoc tests public opinion support appears to significantly influence respondents intentions to participate in demonstrations (see Table 7.11 and Figure 7.5). More specifically, knowing that only a minority of the population considers governmental spending on the environment or education a top priority versus not having any information on public opinion, reduces intentions to participate in a demonstration with 0.33 ($p < 0.05$) on average on a scale from 0 to 10. This effect is not noticed for petitions, indicating that higher cost actions such as demonstrations are more subject to a social desirability influence. This difference is also driven by the fact that demonstrating is not only a higher cost activity, but it's also a "more" collective activity which requires more personal exposure. Additionally, the Social Desirability Hypothesis also receives support in terms of the policy preferences dependent variable. Knowing that a majority of the public opinion supports an issue area increases respondents' preferences for that issue area as a priority of the government by .24 ($p < 0.1$) on a 1 to 10 scale.

7.6 Discussion

This chapter was dedicated to empirically analysing the different ways in which policy change and public opinion influence mobilization as a novel question, rarely addressed in the literature. While previous chapters focused on studying mobilization's influence on policy outputs and agendas, this chapter turns the question around and looks at mobilization as the dependent variable. For this, the chapter used original experimental vignette data gathered under the framework of the ERC POLPART project in 7 EU countries. Vignette experiments are particularly suited for examining this question as they allow the manipulation and control of factors such as policy change and public opinion, which is not possible with observational data. The experiment employed here manipulated policy

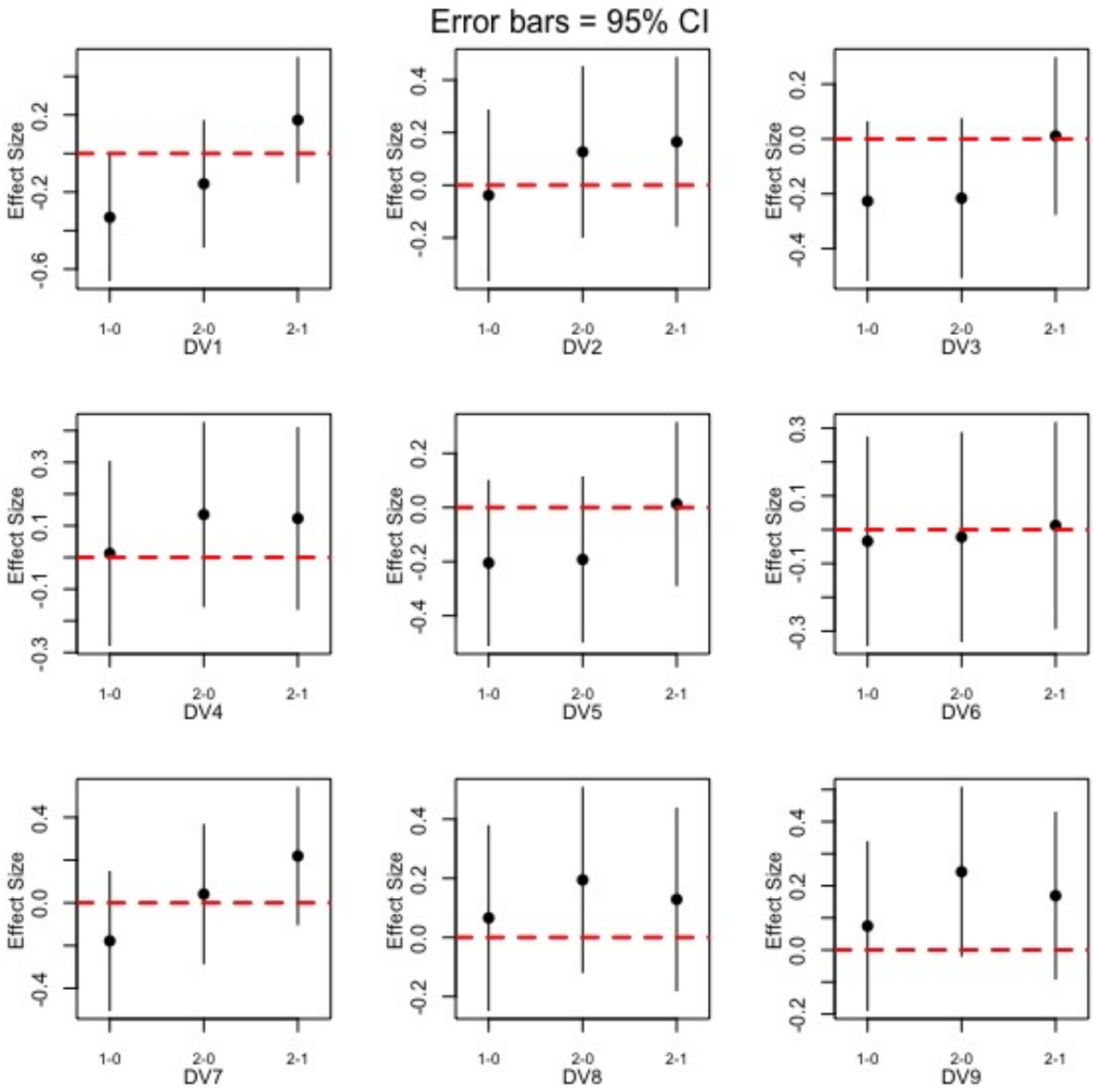


Figure 7.5: The Effects of Public Opinion

Where: DV1: "participate in dem."; DV2: "sign a petition"; DV3: "a dem. would make a difference"; DV4: "a petition would make a difference"; DV5: "my participation in dem. would make a difference"; DV6: "my signing of a petition would make a difference"; DV7: "approve of a dem."; DV8: "approve of a petition"; DV9: "priority should the government give to spending";

change direction (increase vs. decrease in public expenditures), implementation speed, public opinion support, and issue area and subsequently measured respondents political participation intentions, efficacy, approval of forms of mobilization, and preferences for policy.

The results of the manipulation checks used indicate that while policy change and public opinion support were remembered/noticed by respondents, the implementation speed manipulation was not. Therefore, I excluded this factor from further tests and proceeded with MANOVA analyses on the other three manipulations and the nine dependent variables. The results suggest that the three factors do not interact, but each of them has an independent significant effect on the combined dependent variables. Following these significant effects, Tukey's HSD post hoc tests were used to determine which levels of the factors had which effect on which dependent variable. As far as policy change is concerned, the post hoc tests supported a Thermostatic Hypothesis through which an increase in government expenditure for an issue area leads to decreased participation intentions and to decreased efficacy perceptions. However, this Thermostatic Hypothesis worked only for the "lower cost" mobilization action (petitions and not demonstrations), thus going against the Action Cost Hypothesis through which these effects were expected to be higher when it comes to more costly actions. This suggests that policy change, instead of affecting even more negatively "higher cost" actions, it does not affect them at all and that intentions to take part in these and efficacy of these actions is driven by other factors. I show here that one of the significant drivers of intentions to participate in demonstrations is having participated in one in the past. However, a comprehensive treatment of the drivers of participation in demonstrations exceeds the scope of this study. As far as public opinion is concerned, the results indicate a social desirability effect as respondents are less inclined to demonstrate when only a minority supports an issue. Additionally, respondents were also more supportive of policies when these were backed up by a majority of the public

opinion.

All in all, the results suggest that there is reverse causality in the relationship between collective mobilization and policy outputs. Changes in public expenditure for an issue produce a "thermostatic" effect on participation as intentions to get involved decrease when more benefits are obtained. Public opinion also has a mild "social desirability" effect as learning that only a minority supports an issue depressed participation intentions. Additionally, though mainly included for inquiring into reverse causality, this chapter can also be used for shedding light into the mechanisms through which the interaction effects in Figure 3.2 take place. The thermostatic effect found here could indicate that a similar curbing of mobilization could happen when elite support is high for an issue. Additionally the social desirability effect of public opinion on mobilization could also be indicative of the positive interaction between the two when it comes to influencing policy outputs.

Chapter 8

Conclusions - Wrapping-up a Dynamic Phenomenon

8.1 Contributions to the Research Agenda

This dissertation focused on the dynamics between collective mobilization and its consequences aiming to generate innovative theoretical, methodological, and empirical contributions to the literature on political participation and representation. In doing so, it aimed to address a six-point research agenda put forward in the Introduction. The first two items on this agenda consisted of paying particular attention to defining and identifying collective mobilization (1), but also its consequences (2). Additionally, the state of the art also suggested the need for taking into account a broader array of determinants of these consequences (3), while also enlarging the geographical and temporal scope of analyses (4). Finally, focusing on observing effects over time (5) and also looking into reverse causality (6) were added to the research agenda as important issues for conveying the dynamic nature of the relationship between collective mobilization and its consequences. This dissertation

aimed at tackling and improving on each of these aspects in part.

Chapter 2 was dedicated to tackling the first issue on the agenda by expanding on the conceptualization, operationalization, and measurement of collective mobilization used in the following empirical chapters (1). This chapter shows that while social movements include a wide array of forms of manifestation and organization, most of the literature focuses on collective mobilization and, specifically, on the impact of protest events as the more visible and easily measurable of these forms. Protest Event Analysis (PEA) is used in the literature as a methodologically advantageous way of systematically measuring collective mobilization longitudinally and cross-nationally. In line with more recent generations of PEA (Koopmans and Statham, 1999; Koopmans, 2002), the chapter argues that protest events are only one of the many channels that citizens can take for making their voice heard. Therefore, the dissertation expands the unit of analysis used in PEA to include a larger category of public claim making events. It, therefore, departs from a demonstration-centric paradigm in the literature by incorporating a larger action repertoire and by including activities coming from a variety of civil societal actors to obtain a better measure of contention in a certain issue area. Finally, the chapter also identifies a machine-coded dataset (GDELT), novel in the study of collective mobilization, that can be used for measuring the characteristics of public claim making with larger geographical and temporal coverage compared to other PEA datasets.

Secondly, in terms of the aim of defining and identifying the different types of consequences that collective mobilization can have (2), Chapter 3 introduced a comprehensive typology of such consequences, trying to put distinctions into a common framework. This typology is then used for specifying the scope of the empirical analyses, which are focused on analysing two specific types of policy impact, on policy outputs and on policy agendas. The same chapter also tries to place these consequences into the larger context (3). For this, it examines previous literature on how these consequences come about and how the

process is influenced by a host of contextual factors. The hypotheses identified are put together into a dynamic model of representation centred on the impact of collective mobilization on policy outputs and agendas, but involving the impact of public opinion and elite support together with the interactions that they might have with collective mobilization.

In terms of items (4) and (5) on the research agenda, the empirical analyses in Chapters 4 and 5 enlarge the geographical scope of previous studies by including 26 EU countries, over a large period of time (2002-2013), and studying effects across two different issue areas, the environment and education. Additionally, these analyses are focused on checking the impact of predictors over time. Finally, the last chapter also allows looking into reverse causality in the relationship between mobilization and policy outputs (6). It, therefore, inquires into the ways in which policy changes might prompt different participation responses from citizens. The effects of policy change (but also public opinion and issue area) on intentions to engage in protest participation are analysed using original experimental survey data.

To sum up, in what regards theoretical contributions, firstly, the dissertation focused on a more novel conceptualization of collective mobilization as public claim making (Koopmans and Statham, 1999), going beyond the usual demonstration-centric analyses in the literature. Secondly, it also introduced a more comprehensive typology of mobilization's consequences. Thirdly, in theorizing about how these consequences come about, the dissertation proposed a new dynamic model of representation which involved public claim making, elite support for issues, and public opinion as its main elements, but also included other contextual factors. Fourthly, the dissertation also aimed to address reverse causality issues in the relationship between collective mobilization and policy outputs.

Methodologically, the studies included here used machine-coded data, novel in the study of collective mobilization, to measure public claim making events in the issue areas environment and education across time and space. Additionally, these studies also aimed

to go beyond static analyses of movements by focusing specifically on dynamic effects over time. In terms of empirical contributions, the thesis extends the scope of previous analyses by focusing on a large number of countries, 26 European democracies, over a large time-span, the 2002-2013 period, and across two different issue areas, environment and education. Additionally, integrating machine-coded data on public claim-making with other data sources (e.g. CAP data, Manifestos data), the thesis created a harmonized, cross-national dataset measuring contention and policy activities for the environment and education across a long-time period, that could be used in future research projects. Finally, in its study of reverse causality, the thesis also generated original vignette experimental data on how policy change and public opinion influence participation intentions.

8.2 Summary of Findings

Chapter 4 was dedicated to empirically assessing the dynamic model of representation in what regards policy outputs in the form of yearly public expenditure. Chapter 5 focused on assessing the same model, but on policy agendas measured in two different ways: yearly governmental events in the media, and monthly legislative activities. Table 8.1 summarizes the results of these two chapters. The table indicates the significant effects found in studying over-time variations across all three measures included in these chapters and across both issue areas. Green circles represent significant positive effects, while red circles represent significant negative effects. Since this summary of results is designed as a tool for evaluating the main relationships proposed in the dynamic model of representation, it does not include more fine-grained results on the effects of the other contextual factors included in the model. These are discussed in more detail in each chapter in part.

Firstly, central to the dynamic model of representation was a hypothesized positive effect of public claim making events on policy outputs and agendas. We can see that

Table 8.1: Summary of Effects over Outputs and Agendas

	Policy Outputs Public Expenditure - yearly	Policy Agendas (I) Governmental events - yearly	Policy Agendas (II) Legislative Activities - monthly
Public Claim Making	ENV EDU	ENV EDU	
Public Opinion			ENV EDU
Elite Support		EDU	EDU
PCM*Elite Support	ENV	EDU	ENV EDU
PCM*Public Opinion		ENV	ENV

Note: Green = Significant Positive Effect; Red = Significant Negative Effect;

results for both the environmental issue area and the education issue area show that the amount of public claim making does make a significant difference in terms of both policy outputs and agendas (first two columns in Table 8.1). Therefore, the more public claim making there is in an issue area in certain years, the more expenditure for that issue increases in subsequent years and the more governmental events related to that issue area are reported in the media (net of the support of public opinion, parliamentary parties, and other factors). While this effect is consistent when it comes to yearly measured outputs and agendas, it is not observed when it comes to the second measure of policy agendas which was aggregated at the monthly level. This suggests that long-term signals about public preferences are more effective than short-term ones in producing a change. As hypothesized, this might be due to a cumulative effect, as many public claim making events over the course of a year could stand as a display of commitment and, therefore,

show a sustained preference for an issue. Many public claim making events, but only in a month, might not produce a sudden, similar effect in the closest next months as these do not send this additional commitment signal and might appear more volatile.

When it comes to public opinion and elite support, their hypothesized main effects on policy outputs and agendas, besides being rarely significant, also vary across impact measures and issue areas. There is, therefore, a lack of support for their hypothesized positive effects in the proposed dynamic model of representation. This goes against some of the previous findings in the political mediation and public opinion models, which stressed the positive influence of elite support and public support for changing policies and politician's behaviour. In particular, scholars focusing on policy responsiveness to public opinion will find these findings of interest, as general preferences for issues do not seem to be a consistent driver of policy outputs and agendas.

However, when it comes to how public opinion and elite support interact with public claim making, the summary of results paints a clearer picture. Constant through all impact measures and appearing in both issue area we can see a negative interaction effect between elite support and public claim making. This means that the greater the declarative support (in Manifestos) of all parliamentary parties for an issue area, the smaller the effect that collective mobilization has on policy outputs and agendas in these issue areas. I argue that there could be two mutually non-exclusive processes behind this effect: a thermostatic effect on claimants' part as once there is enough formal support for an issue they mobilize less, but also a decrease in how important additional public claim making for an issue is because of an already high elite support. While this dissertation does not include a full analysis of these processes through which the negative interaction happens, Chapter 7 finds support for a similar thermostatic effect in the relationship between policy outputs and political participation.

The hypothesized positive interaction between public claims and public opinion is also

supported across two different impact measures, but only in the environmental issue area. This indicates that the effect of public claim making on policy outputs and agendas in the environmental issue area is stronger in the presence of a supportive public opinion. The main reason for why this positive interaction effect did not show in the education issue area is suspected to lie in the higher popularity of the later issue area in what regards both public opinion and the policy agenda. Public claims for education might not need additional support to enhance their effect as the issues that they address already benefit from high support.

Chapter 6 of this dissertation was dedicated to empirically analysing the differences between studying just protest events or looking at the wider array of public claim making activities. The results obtained suggested that while there are quite some differences in the characteristics of protests events and those of public claim making in our sample, especially in terms of the range of the number of events, these differences didn't critically influence the results concerning policy output impact. If for the environmental issue area there were very few instances of protests in the data (1 protest per year on average) which made it harder to notice a significant impact on expenditure, for education the results mirror very closely those obtained using public claim making. Focusing only on protest demonstrations when trying to see how citizens can affect politics through alternative routes omits some of these channels that citizens undertake to make their voices heard. Nevertheless, the difference between using a wider range of public claims compared to just protest events appears not to be critical when it comes to empirical results, except when dealing with periods, countries, or issue areas where such events are few.

Chapter 7 looked at the reverse side of the coin in the relationship between public policy and mobilization, and examined how policy change and public opinion influence political participation intentions in protest activities. The study looked at two protest activities that differ in their resource-intensiveness, attending street demonstrations and

signing petitions. Additionally, it also looked at approval for such forms of participation, efficacy, and policy preferences. To inquire into how changes in policy influence these intentions and preferences, the study used original vignette experimental data collected in 7 EU countries. The results suggest that public opinion support, policy change, and issue areas all have a significant effect on intentions to participate in protest activities and other preferences related to such activities. As far as policy change is concerned, a "thermostatic" hypothesis through which an increase in government expenditure for an issue area leads to decreased participation intentions and to decreased efficacy perceptions was observed. For public opinion, the results indicated a mild "social desirability" effect as learning that only a minority supports an issue depressed participation intentions.

While this study was mainly included for inquiring into reverse causality, the relationships found here can also explain some of the interaction effects included and supported in the dynamic model of representation. On the one hand, the thermostatic effect found here could indicate that a similar phenomenon is at play behind the negative interaction between public claim making and elite support. On the other hand, the social desirability effect could also be one of the explanations behind the positive interaction effect between public opinion and public claim making.

All in all, by proposing a dynamic model of representation that integrates different hypotheses on the impact that collective mobilization has on policy and which takes into account contextual factors related to public opinion and elite support, the studies presented here aimed to bridge the literature on movement politics and that on political representation. The results for both the environmental issue area and the education issue area show that collective mobilization does matter in terms of policy outputs and agendas. Collective mobilization in an issue area, especially when sustained, is not in vain. This appears to send a signal to politicians about important issues in society to which they appear to positively respond. However, the phenomenon through which collective mobilization makes

an impact is a dynamic one. Collective mobilization interacts with both public opinion and elite support in opposite ways. While public opinion appears to be a catalyser of collective mobilization's impact, elite support seems to reduce its effects. Additionally, this phenomenon is dynamic as it is also characterized by reverse causality in which policy changes significantly influence collective mobilization in their turn.

8.3 Limitations and Future Studies

The innovations that the studies here tried to bring came with their own set of trade-offs and limitations.

A first set of limitations comes from the scope of these analyses. The findings presented here are limited to two issue areas (environment and education) and two impact forms (outputs and agendas) due to data availability on the variables included in the dynamic model of representation. This makes the interpretation of the differences between these issues and impact forms more speculative, rather than formally tested. However, the empirical studies included here set the first steps towards a cross-issue design that can shed light on more specific differences in how the dynamic model of representation plays out in issue areas that differ in terms of their saliency. Along the same lines, future studies could also theorize about and empirically test similarities and differences between applying this model of dynamic representation to more impact forms identified in the typology of consequences introduced in Chapter 3.

A second set of limitations is related to the data quality and measurement of several of the variables included in the empirical studies. While the machine-coded data used for measuring public claim making allowed for greatly expanding the geographical area and time frame compared to previous analyses in the field, it is still limited in several respects. One problem lies in its inability to discern between the more fine-grained goals of these

public claim making activities, or between "movement" and "counter-movement" claims. Consequently, the choice for the two issue areas included here was guided by this limitation. The environment and education come close to being valence issues for which we rarely have counter-movements. Additionally, one can assume that a high number of events concerning a certain issue area are still to have an information effect by drawing attention to that issue area, independent of the more fine-grained distinctions in goals. Finally, the policy outputs and agendas measures used also concerned the general issue areas, rather than fine-grained policies related to more specific goals, which goes in line with observing such information effects. Nevertheless, additional studies could expand on both the characteristics of public claim making events included in their data, and on matching it with policy impact data that covers more fine-grained goals.

In spite of its coverage advantages, another limitation in using this ready-made machine-coded data is related to the biases of the news sources used for identifying public claim making events. The empirical studies included here attempt to mitigate this through a strict cleaning and manually scanning protocol. Additionally, the interpretation of results is done strictly in terms of variation over time and not across space where these biases are expected to show up more. However, future studies that attempt to collect their own data in automated ways could pay more attention to news source selection in order to overcome these biases.

As far as context measures are concerned, the measure of elite support included here is limited to capturing overall support of parliamentary parties and does not take into account polarization and the existence of single issue parties. Additionally, a more complete measure of the openness of the political system than the one used here (number of effective parties) could be devised and implemented. Finally, in terms of the two agenda measures included here, some effects might not be captured since many talks and activities in governments and legislatures happen behind closed doors or many might just not end up in

the media or in the formal questions, debates, and interpellations sessions that legislature have. Nevertheless, this makes the measures of attention used here quite conservative, which should make it harder to capture significant effects.

Finally, the main aim of these studies was to provide a birds-eye view on how collective mobilization influences policy outputs and agendas over time. This type of focus was chosen as it brings a novel contribution to the literature on collective mobilization consequences, which is more often than not case-study oriented. However, while providing this needed overall picture on collective mobilization's impact, the dissertation is limited in its ability to convey an in-depth explanation of many of the causal mechanisms behind these average effects over time and space. The studies included here should be, therefore, thought of as a complement to the many case studies in the literature which focus on specific movements and countries and are more adequate at providing such in-depth pictures of these processes.

8.4 Final remarks

Overall, despite the limitations mentioned above, this dissertation made an important step in addressing a "big" question: understanding how citizens influence politics and whether they can successfully do so. Importantly, it stresses the need for looking into this phenomenon as a dynamic one, that needs to be considered in its broad scope. Studying this question provides us with a better understanding not only on the immediate impact of mobilization, but also on how citizens and politicians form their political issue priorities and how certain issue areas become more salient or contentious than others, aspects important to the viability of liberal democracy, which suffers from citizen dissatisfaction with and disengagement from politics.

The dissertation reflects theoretically persuasive arguments and puts forward compelling empirical evidence for them. This research shows how citizens and elites are in-

tertwined in a dynamic process of policy-making. The findings presented here generally point to the fact that collective mobilization is not in vain. Large-scale increases in mobilization for issues generally correspond to large-scale shifts in policy outputs and agendas addressing those issues. Activists and social movements scholars alike might find these results comforting. Nevertheless, this is not a simple process. Mobilizing citizens can influence policy, but this does not happen in a vacuum. The strength with which they do so is shaped and pulled into many directions by the general population, by parties, and, ultimately, also by the impact of their previous actions.

These findings have important implications for future research as they draw attention to several overlooked aspects of how mobilization influences policy. One of these is that sociological - movement oriented - and political science - elite oriented - perspectives could be better integrated in studies of collective mobilization's consequences. In this respect, elite support for issues should not simply be considered at face value, as its relationship with mobilization is more complex than previously thought. As shown here, declarative elite support can also decrease the influence of mobilization. Additionally, the findings also consolidate the idea that we need look at reverse causality when scrutinizing the relationship between mobilization and its consequences. In doing so, the dissertation draws attention to the importance of looking at both macro-level causal relationships, but also at micro-level ones.

All in all, I believe that the findings presented here are of interest for scholars and activists alike, even if the relationships between collective mobilization and policy are undoubtedly more complex than presented here. The broad scope of this dissertation entails that depth is sometimes sacrificed, and that the proposed causal mechanisms are in part schematic. Much work remains to be done into uncovering the complexities of both what prompts politicians to respond to citizens' demands, but also on what prompts citizens to (not) take action when these demands are (not) responded to. Ultimately, like

any research dealing with important political and social phenomena, this one is bound as well to raise exponentially more questions next to answers it provides.

Appendix A

Appendix Chapter 4

Figure A.1: Trends in Public Claim Making and Environmental Expenditure - 1

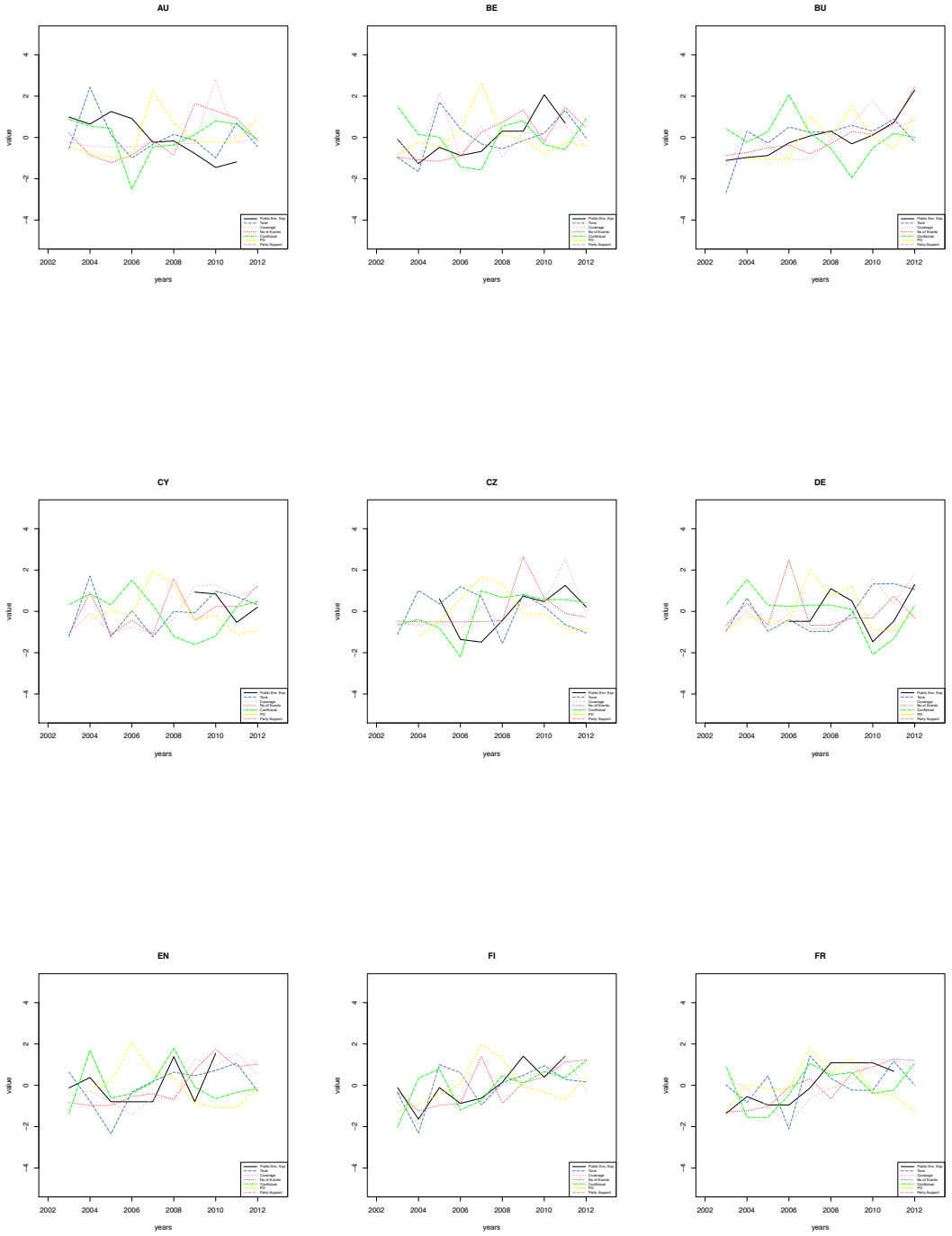


Figure A.2: Trends in Public Claim Making and Environmental Expenditure - 2

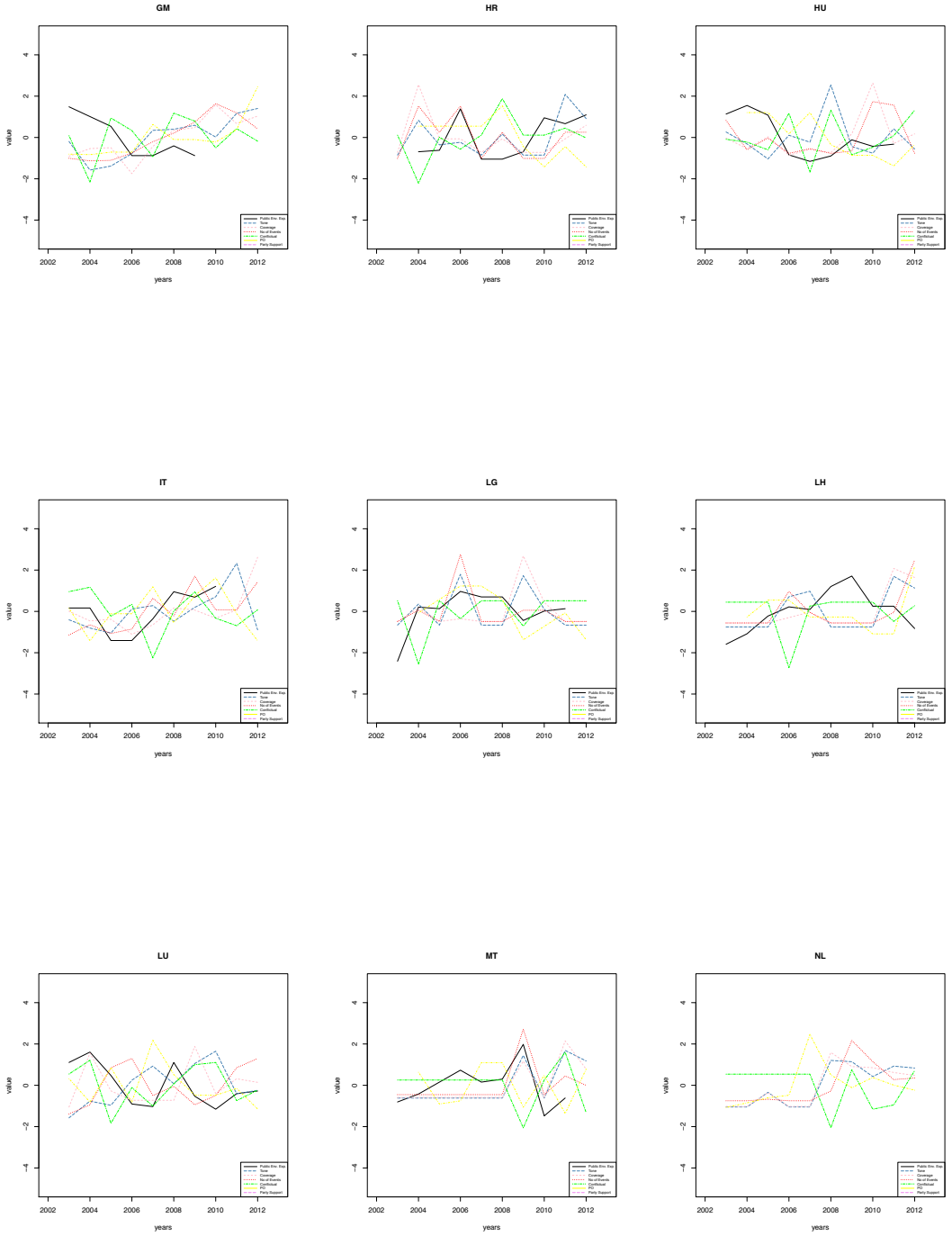


Figure A.3: Trends in Public Claim Making and Environmental Expenditure - 3

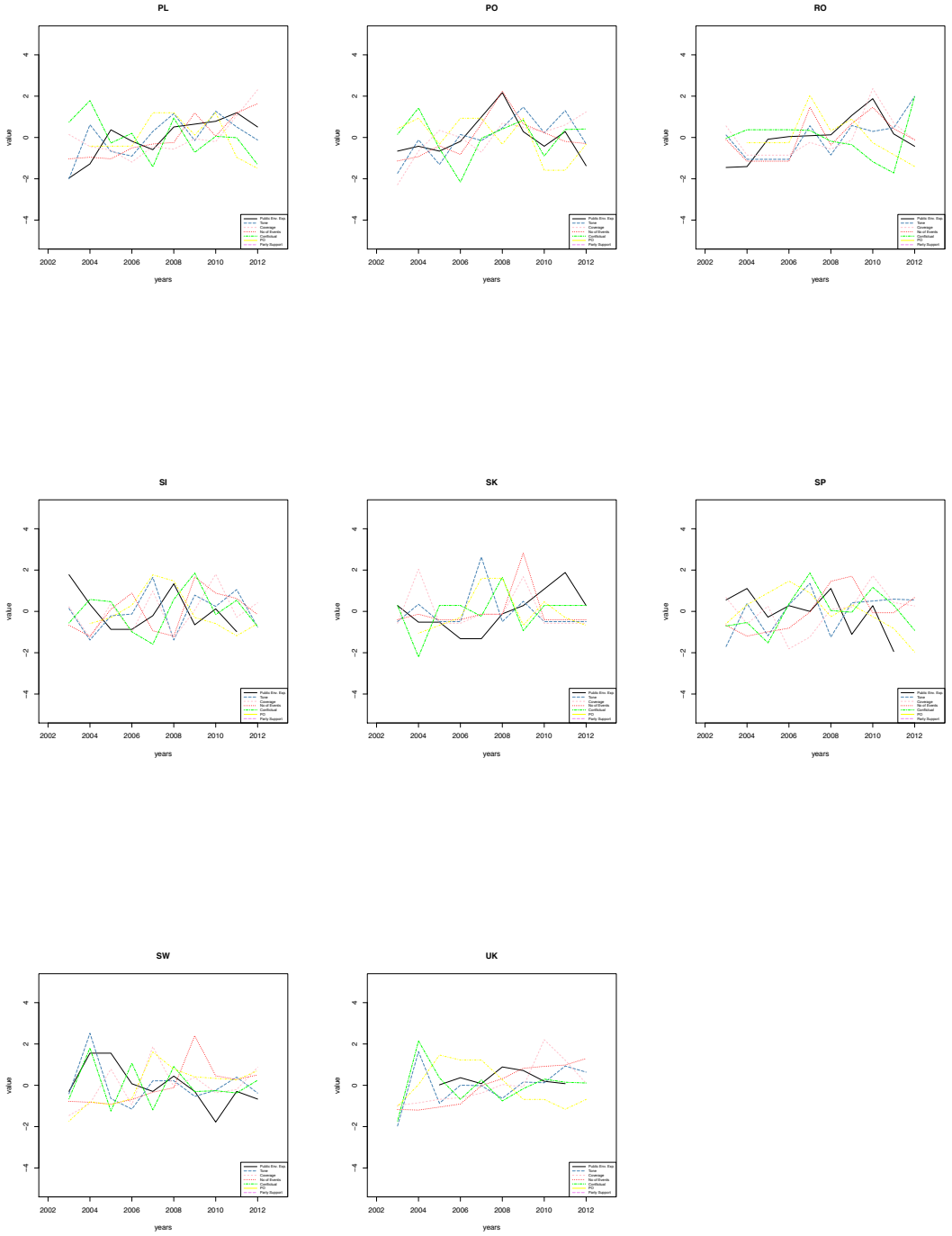


Table A.1: Fixed Effects on Environmental Expenditure - 1

	DV: Environmental Expenditure	
	(1) without interaction	(2) with interaction
BE	−0.079	−0.097
	(0.080)	(0.080)
BU	−0.023	−0.035
	(0.088)	(0.088)
CY	−0.105	−0.103
	(0.076)	(0.076)
CZ	−0.192***	−0.195***
	(0.072)	(0.072)
DE	−0.025	−0.052
	(0.078)	(0.081)
EN	−0.405***	−0.415***
	(0.078)	(0.078)
FI	−0.035	−0.051
	(0.066)	(0.066)
FR	−0.085	−0.105
	(0.065)	(0.067)
GM	−0.302***	−0.303***
	(0.065)	(0.064)
HR	−0.464***	−0.462***
	(0.076)	(0.076)
HU	−0.157**	−0.162**
	(0.078)	(0.078)
IT	0.206***	0.196***
	(0.064)	(0.064)
LG	0.138*	0.137*
	(0.083)	(0.082)
LH	0.230***	0.226***
	(0.081)	(0.081)
LU	−0.117	−0.105
	(0.128)	(0.127)
Observations	214	214
R^2	0.874	0.877
Adjusted R^2	0.851	0.853
Residual Std. Error	0.123 (df = 180)	0.122 (df = 178)
F Statistic	37.828*** (df = 33; 180)	36.235*** (df = 35; 178)
Note:		*p<0.1; **p<0.05; ***p<0.01

Table A.2: Fixed Effects on Environmental Expenditure - 2

	DV: Environmental Expenditure	
	(1) without interaction	(2) with interaction
MT	0.934^{***}	0.942^{***}
	(0.077)	(0.077)
NL	0.824^{***}	0.822^{***}
	(0.080)	(0.080)
PL	-0.173^{**}	-0.197^{**}
	(0.080)	(0.081)
PO	-0.105	-0.112
	(0.068)	(0.068)
RO	-0.003	-0.008
	(0.082)	(0.082)
SI	0.133^{*}	0.131^{*}
	(0.068)	(0.068)
SK	-0.379^{***}	-0.382^{***}
	(0.078)	(0.077)
SP	-0.344^{***}	-0.324^{***}
	(0.064)	(0.064)
SW	-0.247^{***}	-0.251^{***}
	(0.074)	(0.074)
UK	0.200^{***}	0.170^{**}
	(0.070)	(0.072)
Constant	0.589^{***}	0.559^{***}
	(0.115)	(0.116)
Observations	214	214
R^2	0.874	0.877
Adjusted R^2	0.851	0.853
Residual Std. Error	0.123 (df = 180)	0.122 (df = 178)
F Statistic	37.828^{***} (df = 33; 180)	36.235^{***} (df = 35; 178)
Note:		*p<0.1; **p<0.05; ***p<0.01

Table A.3: Fixed Effects on Education Expenditure - 1

	DV: Education Expenditure	
	(1) without interaction	(2) with interaction
BE	0.375^{*}	0.382^{*}
	(0.213)	(0.214)
BU	-0.719^{***}	-0.740^{***}
	(0.246)	(0.251)
CY	1.401^{***}	1.396^{***}
	(0.165)	(0.166)
CZ	-0.982^{***}	-0.997^{***}
	(0.193)	(0.197)
DA	2.655^{***}	2.658^{***}
	(0.152)	(0.153)
EN	0.352	0.336
	(0.215)	(0.218)
FI	0.775^{***}	0.776^{***}
	(0.158)	(0.159)
FR	0.211	0.199
	(0.162)	(0.165)
GM	-0.850^{***}	-0.901^{***}
	(0.178)	(0.204)
HR	-0.650^{***}	-0.669^{***}
	(0.226)	(0.230)
HU	0.297	0.277
	(0.222)	(0.228)
IT	-1.000^{***}	-1.001^{***}
	(0.167)	(0.168)
LG	0.156	0.142
	(0.228)	(0.232)
LH	0.062	0.049
	(0.235)	(0.239)
Observations	197	197
R^2	0.930	0.930
Adjusted R^2	0.917	0.916
Residual Std. Error	0.309 (df = 164)	0.311 (df = 162)
F Statistic	68.477^{***} (df = 32; 164)	63.787^{***} (df = 34; 162)
Note:		*p<0.1; **p<0.05; ***p<0.01

Table A.4: Fixed Effects on Education Expenditure - 2

	DV: Education Expenditure	
	(1) without interaction	(2) with interaction
MT	1.581***	1.567***
	(0.210)	(0.213)
NL	−0.429***	−0.425***
	(0.152)	(0.153)
PL	0.336	0.316
	(0.228)	(0.234)
PO	0.220	0.204
	(0.184)	(0.188)
RO	−0.900***	−0.925***
	(0.262)	(0.272)
SI	0.313	0.303
	(0.191)	(0.194)
SK	−1.255***	−1.265***
	(0.219)	(0.221)
SP	−0.709***	−0.717***
	(0.163)	(0.164)
SW	1.237***	1.233***
	(0.177)	(0.178)
UK	−0.152	−0.168
	(0.177)	(0.185)
Constant	4.047***	4.097***
	(0.365)	(0.389)
Observations	197	197
R^2	0.930	0.930
Adjusted R^2	0.917	0.916
Residual Std. Error	0.309 (df = 164)	0.311 (df = 162)
F Statistic	68.477*** (df = 32; 164)	63.787*** (df = 34; 162)
Note:		*p<0.1; **p<0.05; ***p<0.01

Figure A.4: Trends in Public Claim Making and Education Expenditure - 1

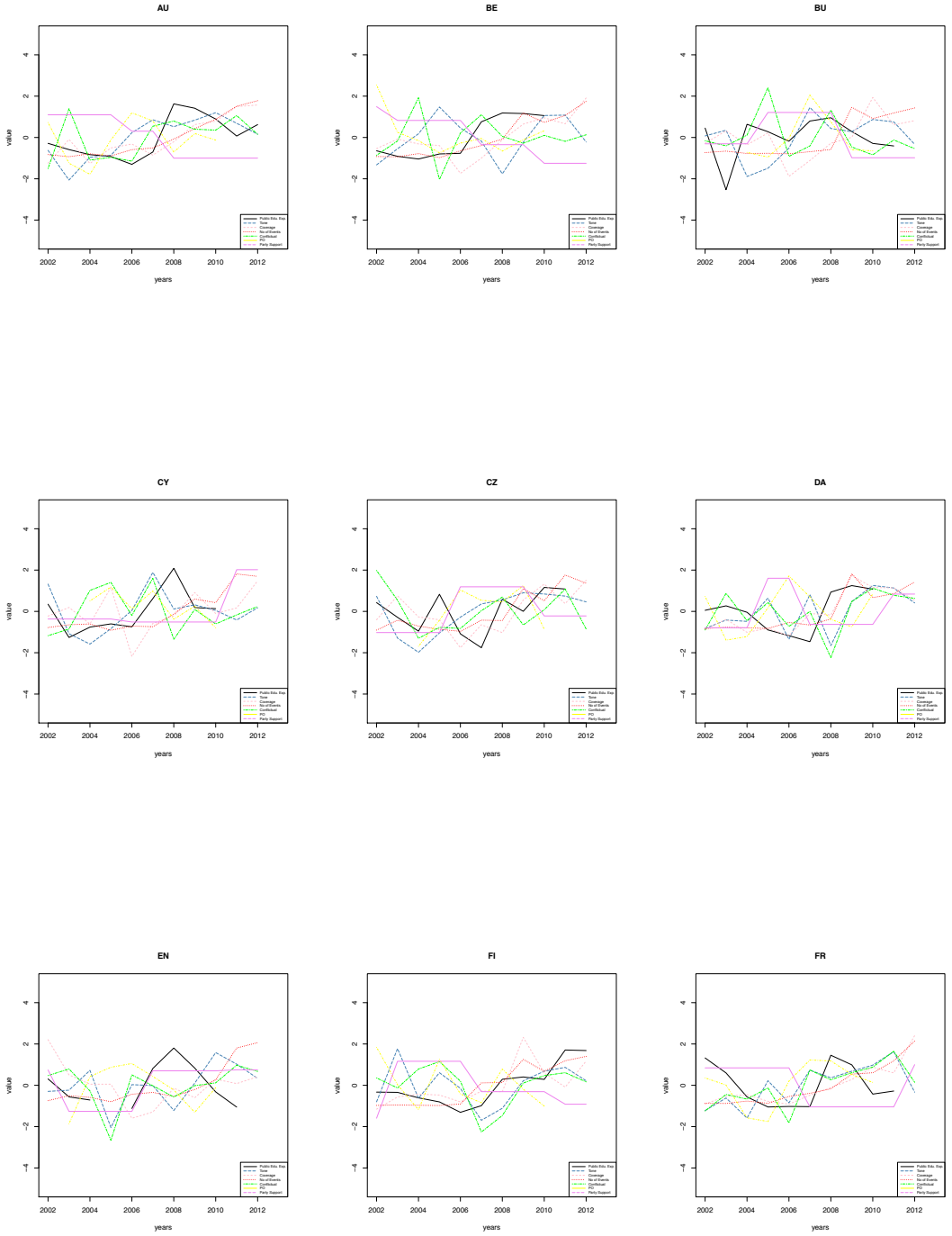


Figure A.5: Trends in Public Claim Making and Education Expenditure - 2

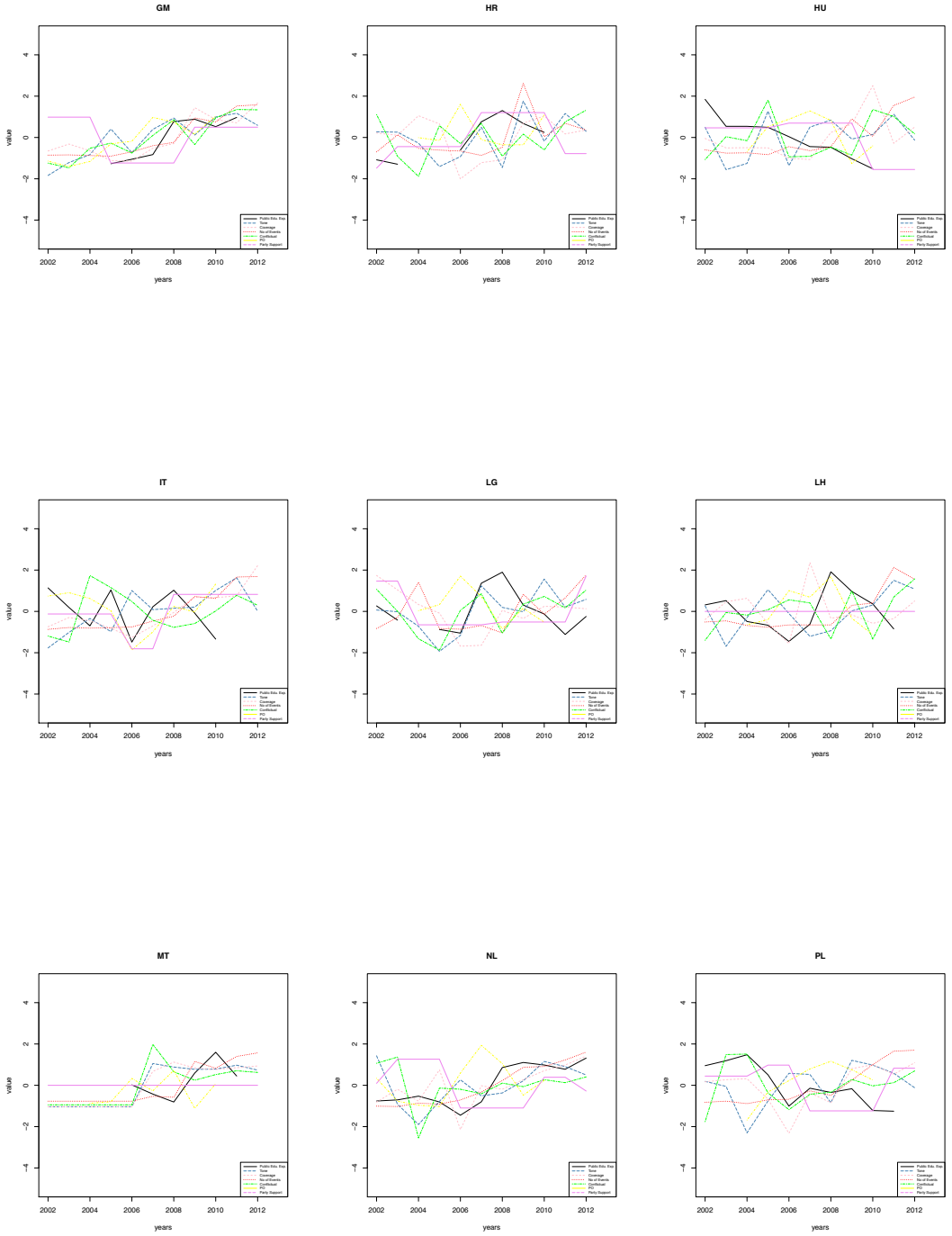


Figure A.6: Trends in Public Claim Making and Education Expenditure - 3

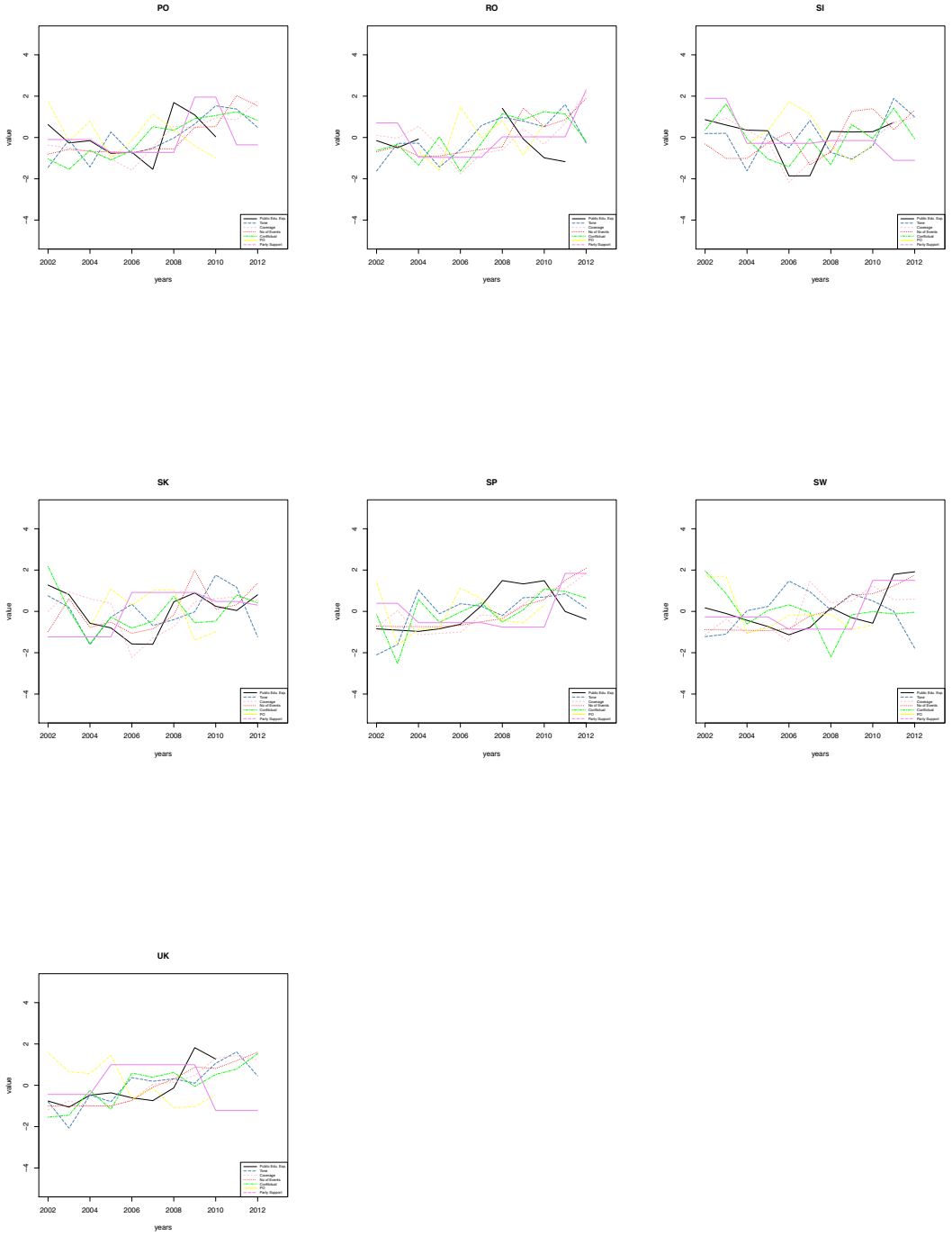


Table A.5: PCM and Elite Support

	Dependent variable:
	Public Env. Exp. (*with fixed effects)
No.Events	0.003**
	(0.001)
Elite Supp.	−0.00001
	(0.0001)
Events*Elite Supp.	−0.00000**
	(0.00000)
Constant	0.612***
	(0.056)
Observations	214
R^2	0.875
Adjusted R^2	0.856
Residual Std. Error	0.121 (df = 185)
F Statistic	46.183*** (df = 28; 185)
Note:	*p<0.1; **p<0.05; ***p<0.01

Table A.6: Popularity of Environment and Education in Smaller Parties (< 25% of seats)

Statistic	N	Mean	St. Dev.	Median
Env. Support	300	6.012	7.167	4.455
Edu. Support	300	4.898	3.957	4.266

Appendix B

Appendix Chapter 5

Table B.1: Fixed Effects on Governmental Events - 1

	Environment		Education	
	(1)	(2)	(3)	(4)
	*fixed effects	*fixed effects & interactions	*fixed effects	*fixed effects & interactions
BU	6.308*	5.538	4.205	4.854
	(3.680)	(3.651)	(4.824)	(3.994)
CY	1.395	0.861	0.095	0.707
	(3.179)	(3.148)	(3.180)	(2.601)
CZ	4.539	4.596	1.420	3.851
	(3.012)	(2.974)	(3.730)	(3.096)
DE	6.631**	8.302**	0.413	0.574
	(3.271)	(3.362)	(2.946)	(2.404)
EN	2.381	1.861	3.192	2.909
	(3.258)	(3.228)	(4.231)	(3.484)
FI	−1.122	−1.177	1.602	1.431
	(2.750)	(2.736)	(3.049)	(2.486)
FR	3.896	1.884	13.960***	13.761***
	(2.695)	(2.792)	(3.169)	(2.608)
GM	14.198***	13.625***	−2.599	−1.625
	(2.695)	(2.670)	(3.438)	(3.202)
HR	4.419	3.467	4.040	4.206
	(3.339)	(3.320)	(4.395)	(3.636)
HU	3.275	2.744	0.706	2.611
	(3.270)	(3.236)	(4.330)	(3.607)
IT	6.208**	5.827**	−0.638	0.114
	(2.690)	(2.666)	(3.223)	(2.629)
LG	4.707	3.872	0.811	3.130
	(3.525)	(3.497)	(4.440)	(3.666)
LH	4.277	3.391	1.958	3.502
	(3.402)	(3.377)	(4.586)	(3.772)
Constant	−6.854	−5.616	3.953	−4.510
	(4.827)	(4.848)	(6.648)	(5.278)
Observations	207	207	188	188
R^2	0.455	0.475	0.869	0.914
Adjusted R^2	0.351	0.367	0.842	0.895
Residual Std. Error	5.121 (df = 173)	5.056 (df = 171)	5.977 (df = 156)	4.874 (df = 154)
F Statistic	4.380*** (df = 33; 173)	4.420*** (df = 35; 171)	33.243*** (df = 31; 156)	49.412*** (df = 33; 154)
Note:			*p<0.1; **p<0.05; ***p<0.01	

Table B.2: Fixed Effects on Governmental Events - 2

	Environment		Education	
	(1)	(2)	(3)	(4)
	*fixed effects	*fixed effects & interactions	*fixed effects	*fixed effects & interactions
MT	−0.015	0.959	5.404	5.375
	(3.210)	(3.195)	(4.083)	(3.361)
NL	4.052	4.108	1.264	0.996
	(3.358)	(3.316)	(2.950)	(2.408)
PL	4.139	3.634	2.572	4.078
	(3.450)	(3.434)	(4.452)	(3.699)
PO	0.227	−0.712	1.016	1.891
	(2.996)	(2.983)	(3.589)	(2.977)
RO	4.813	3.954	−1.395	3.537
	(3.442)	(3.416)	(5.085)	(4.280)
SI	4.707	4.371	−0.207	1.769
	(2.858)	(2.825)	(3.692)	(3.040)
SK	4.891	4.359	4.826	4.036
	(3.250)	(3.216)	(4.287)	(3.509)
SP	2.191	2.222	−3.060	−2.058
	(2.750)	(2.764)	(3.149)	(2.584)
SW	−3.124	−4.155	3.553	3.567
	(3.091)	(3.080)	(3.461)	(2.825)
UK	−6.362**	−7.699**	4.367	8.929***
	(2.927)	(2.988)	(3.438)	(2.916)
BE	0.537	0.395		
	(3.366)	(3.344)		
LU	−3.783	−2.656		
	(5.381)	(5.333)		
Constant	−6.854	−5.616	3.953	−4.510
	(4.827)	(4.848)	(6.648)	(5.278)
Observations	207	207	188	188
R^2	0.455	0.475	0.869	0.914
Adjusted R^2	0.351	0.367	0.842	0.895
Residual Std. Error	5.121 (df = 173)	5.056 (df = 171)	5.977 (df = 156)	4.874 (df = 154)
F Statistic	4.380*** (df = 33; 173)	4.420*** (df = 35; 171)	33.243*** (df = 31; 156)	49.412*** (df = 33; 154)

Note: *p<0.1; **p<0.05; ***p<0.01

Table B.3: Fixed Effects on Monthly Legislative Activities in the Environmental Issue Area

	Leg. Qs T0		Leg. Qs T1		Leg. Qs T2	
	(1)	(2)	(3)	(4)	(5)	(6)
DE	−0.187	−0.262	−0.214	−0.266	−0.217	−0.252
	(0.343)	(0.341)	(0.346)	(0.345)	(0.349)	(0.349)
HU	0.314	0.129	0.278	0.236	0.205	0.185
	(0.491)	(0.489)	(0.494)	(0.495)	(0.498)	(0.501)
IT	0.332	0.242	0.280	0.210	0.268	0.223
	(0.313)	(0.312)	(0.314)	(0.314)	(0.315)	(0.316)
NL	0.438	0.375	0.343	0.249	0.372	0.310
	(0.307)	(0.306)	(0.308)	(0.309)	(0.309)	(0.311)
SP	0.447	0.298	0.366	0.306	0.334	0.300
	(0.455)	(0.452)	(0.458)	(0.457)	(0.461)	(0.462)
UK	0.705*	0.477	0.660	0.541	0.618	0.550
	(0.416)	(0.416)	(0.418)	(0.421)	(0.420)	(0.424)
Constant	−0.328	−0.079	−0.341	−0.385	−0.110	−0.154
	(0.777)	(0.776)	(0.782)	(0.784)	(0.789)	(0.794)
Observations	720	720	715	715	705	705
R^2	0.041	0.060	0.038	0.048	0.039	0.043
Adjusted R^2	0.022	0.039	0.019	0.026	0.019	0.021
Residual Std. Error	1.025	1.016	1.026	1.022	1.022	1.022
	(df = 705)	(df = 703)	(df = 700)	(df = 698)	(df = 690)	(df = 688)
F Statistic	2.134***	2.823***	1.971**	2.207***	1.992**	1.937**
	(df = 14; 705)	(df = 16; 703)	(df = 14; 700)	(df = 16; 698)	(df = 14; 690)	(df = 16; 688)

Note: *p<0.1; **p<0.05; ***p<0.01

Table B.4: Fixed Effects on Monthly Legislative Activities in the Education Issue Area

	Leg. Qs T0		Leg. Qs T1		Leg. Qs T2	
	(1)	(2)	(3)	(4)	(5)	(6)
DE	−0.977***	−0.803**	−0.852**	−0.661*	−0.790**	−0.634
	(0.348)	(0.377)	(0.352)	(0.382)	(0.359)	(0.389)
HU	−0.397	−0.351	−0.299	−0.127	−0.207	−0.083
	(0.500)	(0.532)	(0.507)	(0.541)	(0.520)	(0.554)
IT	−0.169	−0.142	−0.080	−0.005	−0.078	−0.024
	(0.289)	(0.299)	(0.291)	(0.302)	(0.295)	(0.306)
NL	−0.838**	−0.673*	−0.726**	−0.544	−0.700**	−0.552
	(0.326)	(0.354)	(0.330)	(0.359)	(0.336)	(0.365)
SP	−0.339	−0.262	−0.210	−0.044	−0.205	−0.080
	(0.439)	(0.467)	(0.444)	(0.473)	(0.453)	(0.482)
UK	−0.823*	−0.628	−0.631	−0.369	−0.559	−0.353
	(0.430)	(0.482)	(0.435)	(0.488)	(0.444)	(0.496)
Constant	−0.003	0.014	−0.079	−0.310	−0.116	−0.272
	(0.820)	(0.872)	(0.832)	(0.887)	(0.856)	(0.909)
Observations	744	744	737	737	723	723
R^2	0.054	0.060	0.049	0.052	0.048	0.050
Adjusted R^2	0.036	0.040	0.031	0.031	0.029	0.028
Residual Std. Error	0.995	0.993	0.999	0.999	1.005	1.005
	(df = 729)	(df = 727)	(df = 722)	(df = 720)	(df = 708)	(df = 706)
F Statistic	2.959***	2.923***	2.681***	2.472***	2.524***	2.310***
	(df = 14; 729)	(df = 16; 727)	(df = 14; 722)	(df = 16; 720)	(df = 14; 708)	(df = 16; 706)

Note: *p<0.1; **p<0.05; ***p<0.01

Appendix C

Appendix Chapter 6

Figure C.1: Trends in Protest Events and Environmental Expenditure - 1

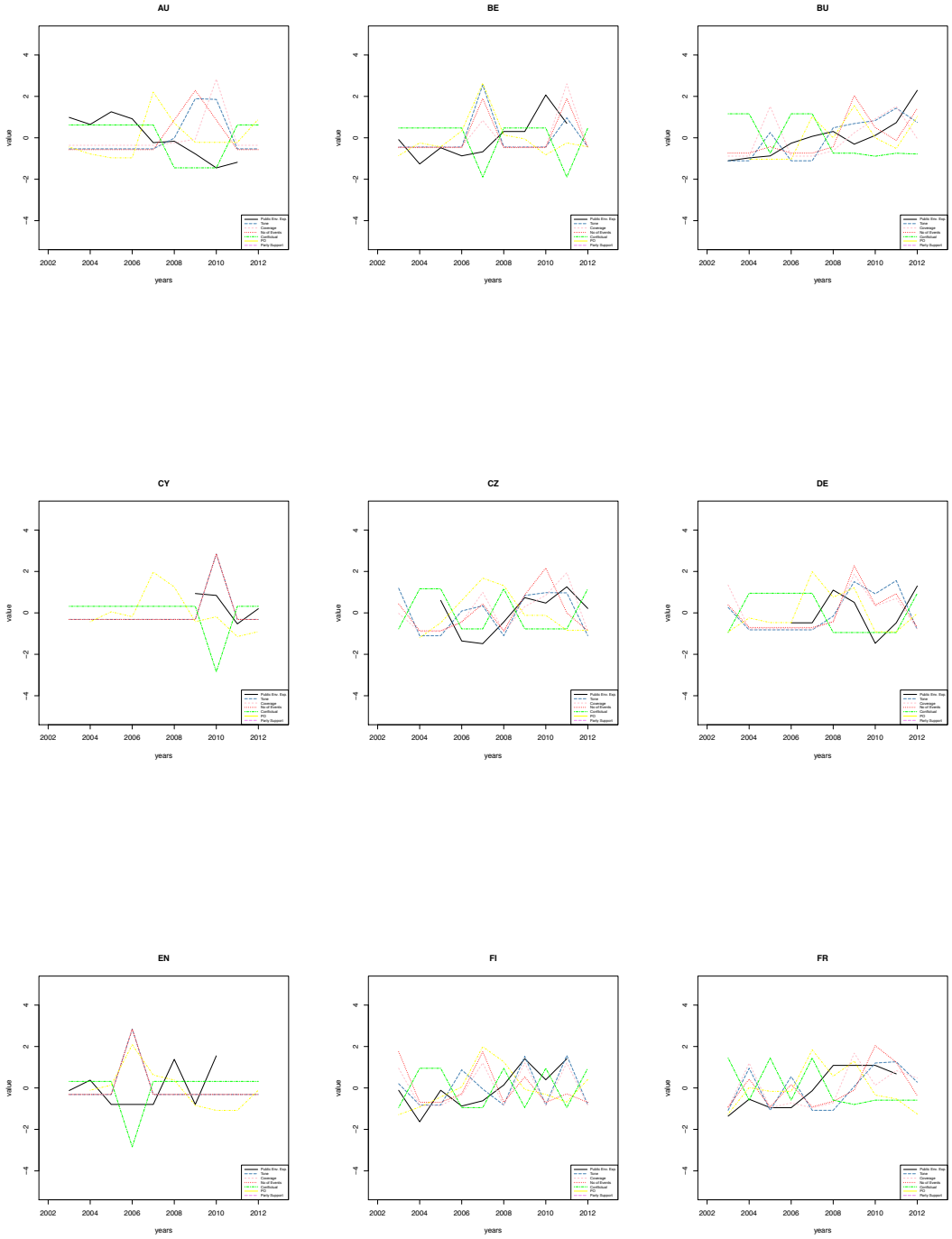


Figure C.2: Trends in Protest Events and Environmental Expenditure - 2

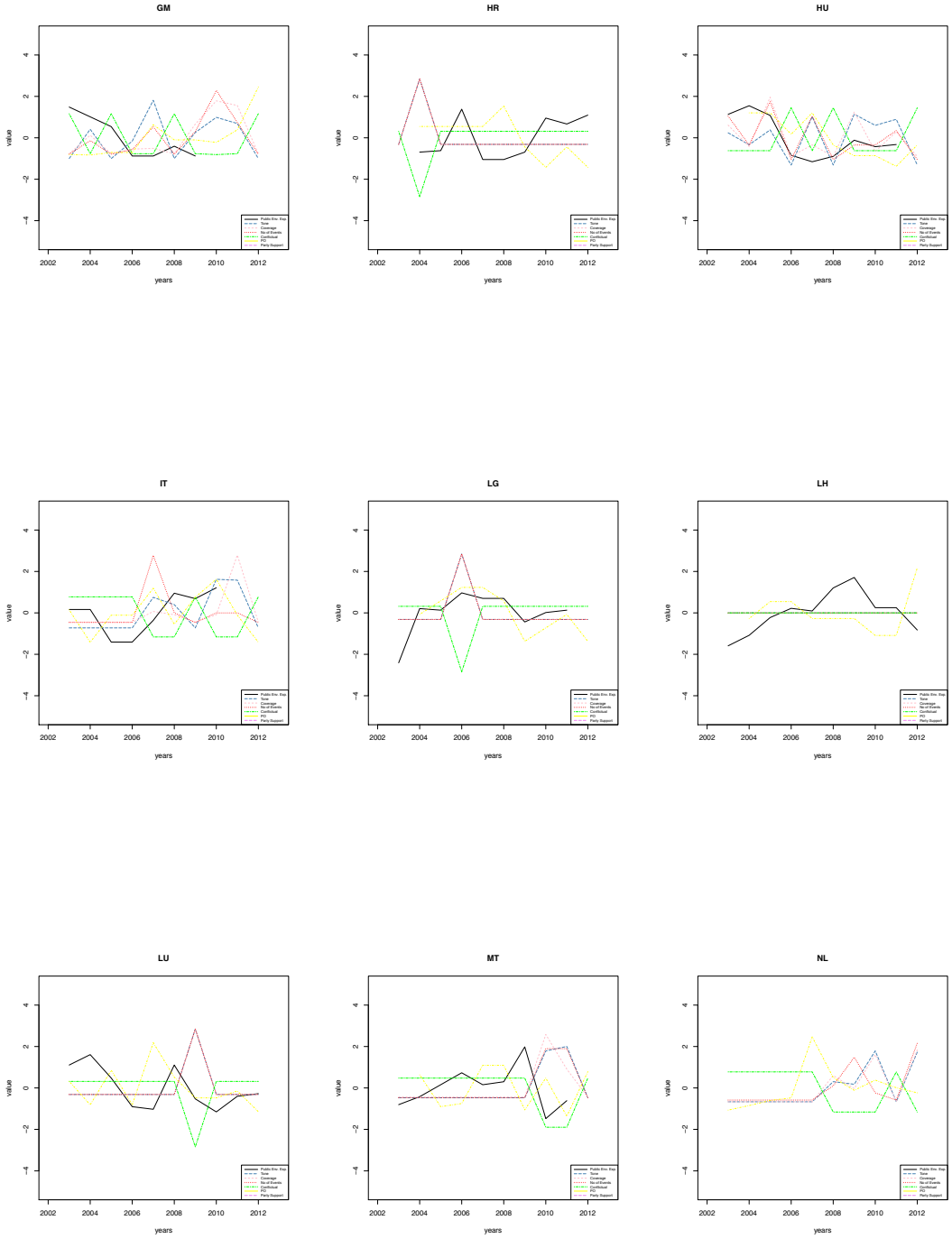


Figure C.3: Trends in Protest Events and Environmental Expenditure - 3

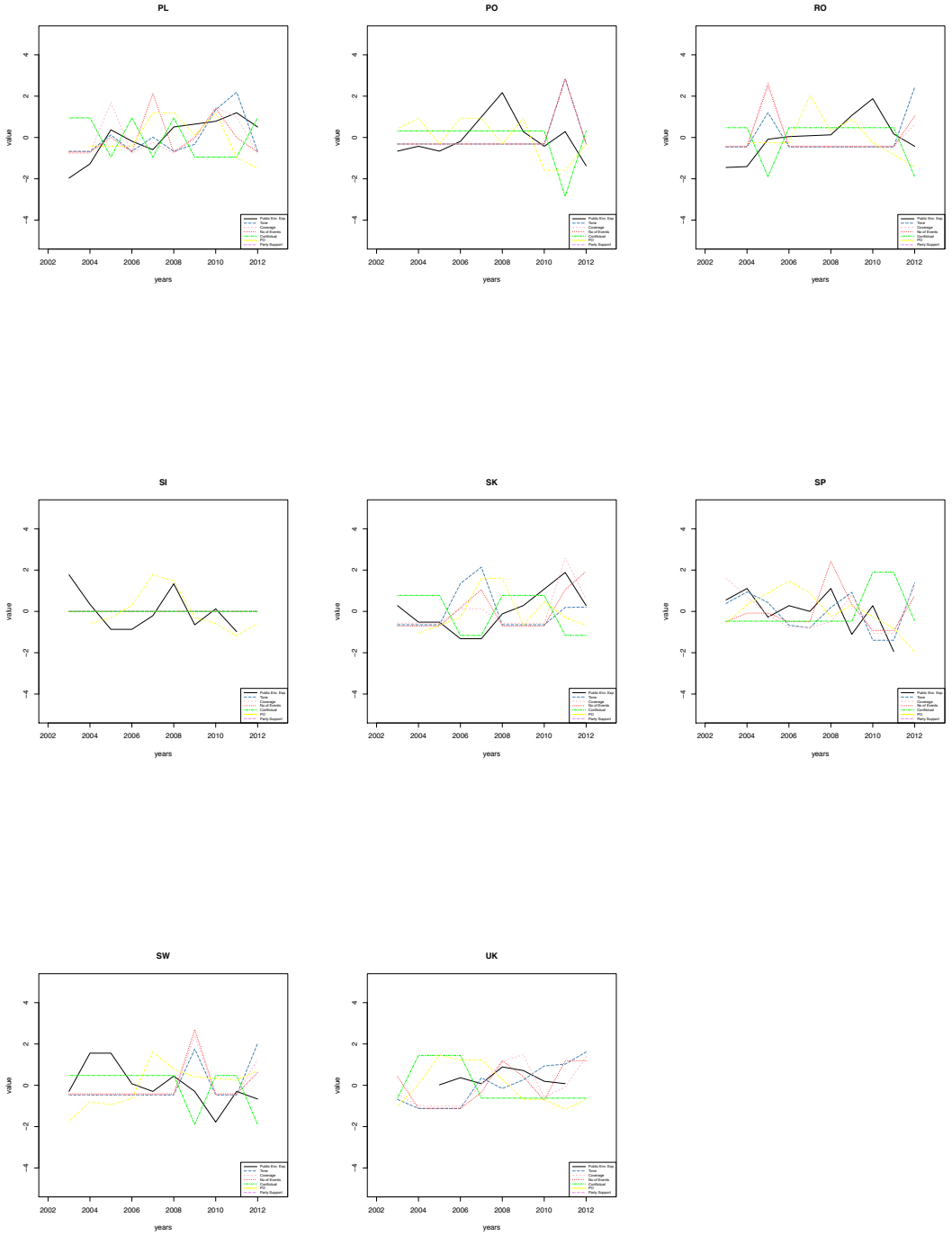


Figure C.4: Trends in Protest Events and Education Expenditure - 1

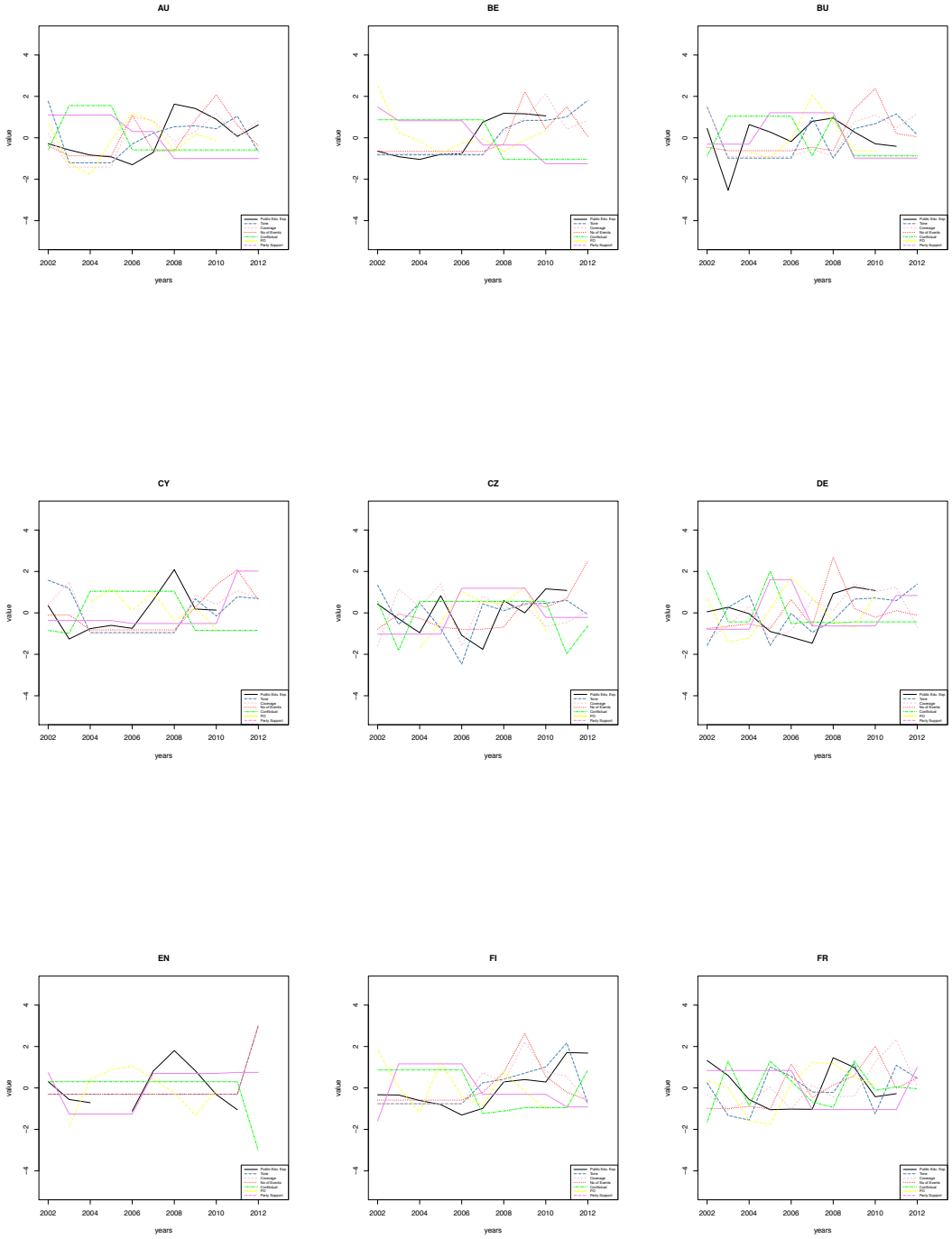


Figure C.5: Trends in Protest Events and Education Expenditure - 2

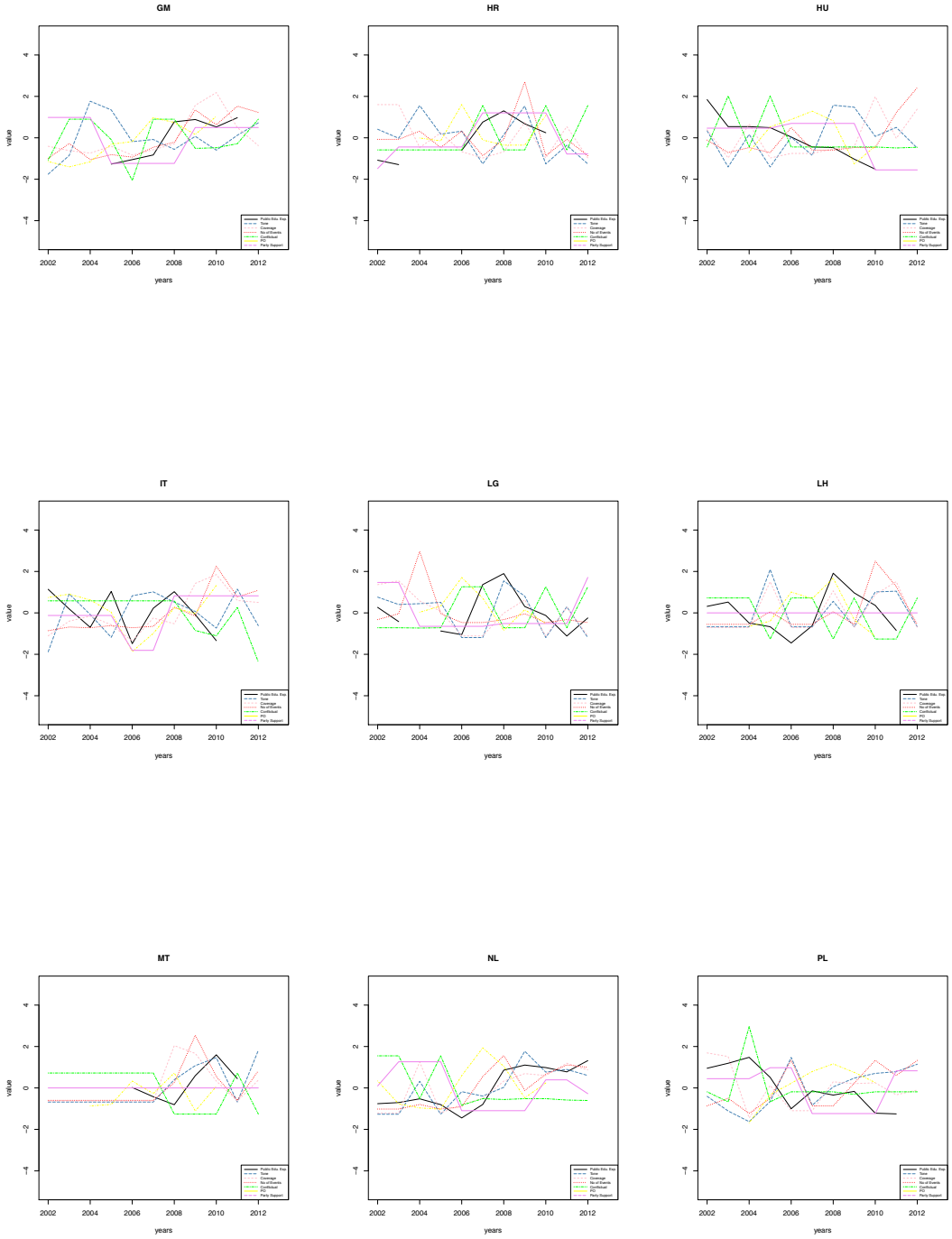


Figure C.6: Trends in Protest Events and Education Expenditure - 3

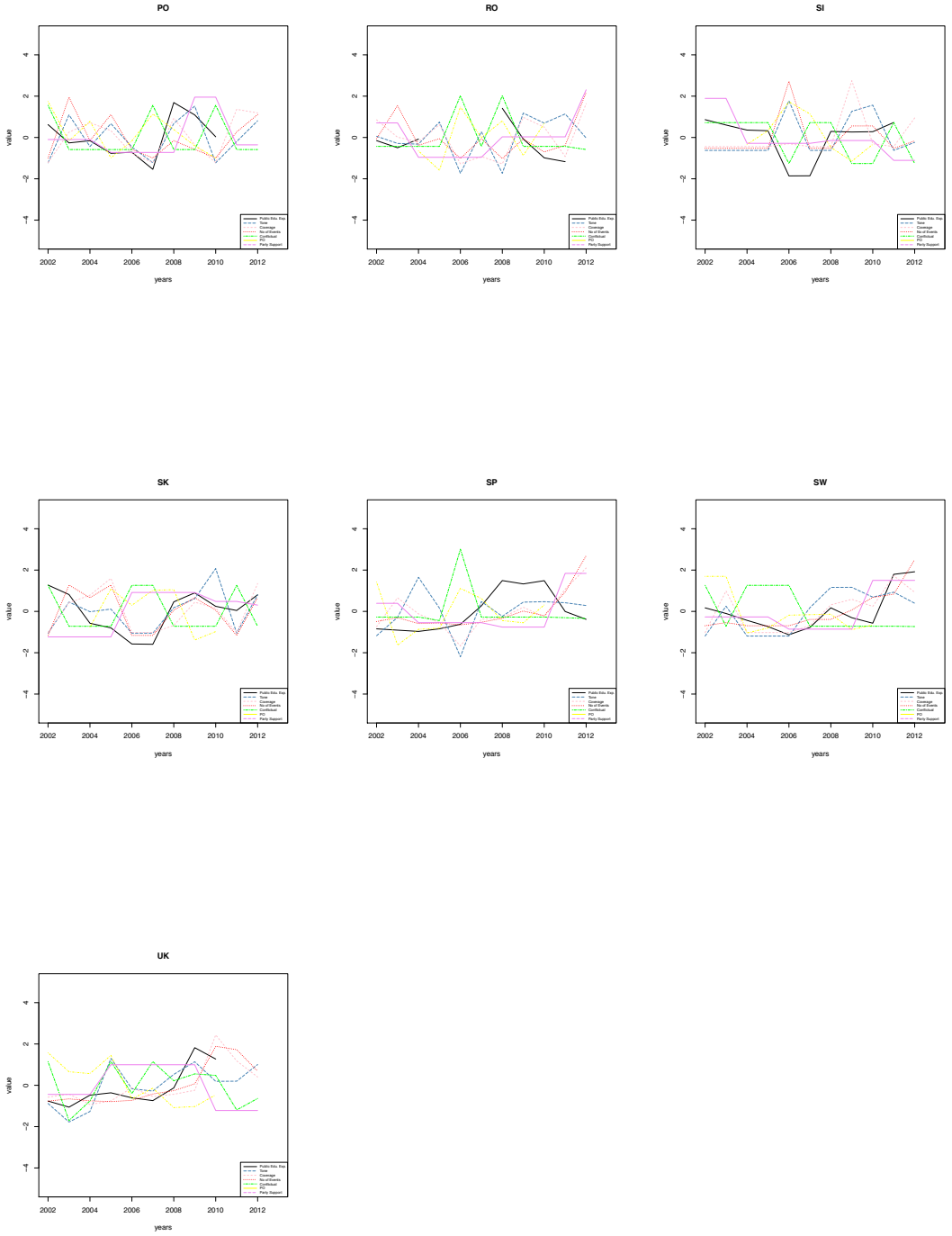


Table C.1: Fixed Effects on Public Expenditure - Protest - 1

	Dependent variable:			
	Public Env. Exp.		Public Edu. Exp.	
	(1)	(2)	(3)	(4)
BE	−0.072	−0.074	0.337	0.341
	(0.081)	(0.081)	(0.221)	(0.222)
BU	−0.004	−0.018	−0.682***	−0.706***
	(0.088)	(0.089)	(0.249)	(0.254)
CY	−0.095	−0.095	1.424***	1.415***
	(0.077)	(0.077)	(0.167)	(0.169)
CZ	−0.146**	−0.148**	−0.995***	−1.010***
	(0.070)	(0.070)	(0.200)	(0.204)
DE	−0.038	−0.036	2.656***	2.657***
	(0.080)	(0.080)	(0.154)	(0.155)
EN	−0.387***	−0.391***	0.339	0.320
	(0.078)	(0.078)	(0.211)	(0.214)
FI	−0.031	−0.036	0.766***	0.761***
	(0.068)	(0.068)	(0.162)	(0.163)
FR	−0.054	−0.058	0.221	0.209
	(0.064)	(0.065)	(0.174)	(0.188)
GM	−0.281***	−0.280***	−0.850***	−0.892***
	(0.066)	(0.066)	(0.180)	(0.190)
HR	−0.442***	−0.441***	−0.634***	−0.660***
	(0.076)	(0.077)	(0.234)	(0.239)
HU	−0.131*	−0.131	0.316	0.288
	(0.079)	(0.079)	(0.225)	(0.232)
Observations	214	214	197	197
R^2	0.871	0.872	0.928	0.929
Adjusted R^2	0.848	0.847	0.914	0.914
Residual Std. Error	0.124 (df = 180)	0.124 (df = 178)	0.314 (df = 164)	0.315 (df = 162)
F Statistic	36.949*** (df = 33; 180)	34.676*** (df = 35; 178)	66.436*** (df = 32; 164)	62.087*** (df = 34; 162)

Note: *p<0.1; **p<0.05; ***p<0.01

Table C.2: Fixed Effects on Public Expenditure - Protest - 2

	Dependent variable:			
	Public Env. Exp.		Public Edu. Exp.	
	(1)	(2)	(3)	(4)
IT	0.215^{***}	0.214^{***}	-0.986^{***}	-0.980^{***}
	(0.066)	(0.066)	(0.173)	(0.174)
LG	0.155^{*}	0.155^{*}	0.109	0.096
	(0.084)	(0.084)	(0.226)	(0.231)
LH	0.250^{***}	0.248^{***}	0.046	0.028
	(0.082)	(0.082)	(0.232)	(0.237)
MT	0.953^{***}	0.956^{***}	1.648^{***}	1.623^{***}
	(0.077)	(0.078)	(0.218)	(0.222)
NL	0.851^{***}	0.851^{***}	-0.396^{**}	-0.402^{**}
	(0.078)	(0.078)	(0.157)	(0.158)
PL	-0.141^{*}	-0.139^{*}	0.372	0.344
	(0.079)	(0.079)	(0.237)	(0.243)
PO	-0.093	-0.102	0.216	0.194
	(0.068)	(0.069)	(0.190)	(0.194)
RO	0.016	0.014	-0.914^{***}	-0.935^{***}
	(0.082)	(0.083)	(0.263)	(0.273)
SI	0.143^{**}	0.143^{**}	0.268	0.257
	(0.069)	(0.069)	(0.189)	(0.192)
SK	-0.353^{***}	-0.356^{***}	-1.265^{***}	-1.282^{***}
	(0.079)	(0.079)	(0.222)	(0.225)
Observations	214	214	197	197
R^2	0.871	0.872	0.928	0.929
Adjusted R^2	0.848	0.847	0.914	0.914
Residual Std. Error	0.124 (df = 180)	0.124 (df = 178)	0.314 (df = 164)	0.315 (df = 162)
F Statistic	36.949^{***} (df = 33; 180)	34.676^{***} (df = 35; 178)	66.436^{***} (df = 32; 164)	62.087^{***} (df = 34; 162)

Note: *p<0.1; **p<0.05; ***p<0.01

Table C.3: Fixed Effects on Public Expenditure - Protest - 3

	Dependent variable:			
	Public Env. Exp.		Public Edu. Exp.	
	(1)	(2)	(3)	(4)
SP	-0.307^{***}	-0.301^{***}	-0.690^{***}	-0.693^{***}
	(0.065)	(0.066)	(0.170)	(0.172)
SW	-0.244^{***}	-0.254^{***}	1.216^{***}	1.231^{***}
	(0.075)	(0.076)	(0.178)	(0.180)
UK	0.277^{***}	0.277^{***}	-0.068	-0.059
	(0.062)	(0.063)	(0.169)	(0.173)
LU	-0.116	-0.112		
	(0.115)	(0.115)		
Constant	0.559^{***}	0.545^{***}	3.819^{***}	3.874^{***}
	(0.115)	(0.116)	(0.363)	(0.389)
Observations	214	214	197	197
R^2	0.871	0.872	0.928	0.929
Adjusted R^2	0.848	0.847	0.914	0.914
Residual Std. Error	0.124 (df = 180)	0.124 (df = 178)	0.314 (df = 164)	0.315 (df = 162)
F Statistic	36.949^{***}	34.676^{***}	66.436^{***}	62.087^{***}
	(df = 33; 180)	(df = 35; 178)	(df = 32; 164)	(df = 34; 162)
Note:				*p<0.1; **p<0.05; ***p<0.01

Table C.4: Fixed Effects on Governmental Events - Protest - 1

	Dependent variable:			
	Environment		Education	
	(1)	(2)	(3)	(4)
BE	1.158	1.150	−5.389	−4.740
	(3.214)	(2.696)	(5.306)	(5.187)
BU	7.580**	11.017***	9.137	13.014**
	(3.483)	(2.945)	(5.631)	(5.600)
CY	1.169	1.475	−0.281	1.300
	(2.500)	(2.097)	(3.993)	(3.919)
CZ	8.112***	9.171***	3.861	6.360
	(2.757)	(2.317)	(4.615)	(4.553)
DE	2.153	1.372	0.041	−0.174
	(2.765)	(2.329)	(3.762)	(3.669)
EN	4.459	5.150**	5.819	8.106*
	(2.935)	(2.462)	(4.780)	(4.705)
FI	−1.276	−0.619	−1.245	−0.376
	(2.620)	(2.199)	(4.001)	(3.906)
FR	5.094**	5.902***	7.394*	12.884***
	(2.520)	(2.116)	(4.163)	(4.424)
GM	16.116***	16.421***	2.109	5.796
	(2.444)	(2.063)	(3.821)	(3.892)
HR	5.779*	5.097**	4.853	8.847*
	(3.046)	(2.556)	(5.168)	(5.170)
HU	4.974	4.948*	3.478	7.356
	(3.057)	(2.570)	(5.086)	(5.084)
Observations	247	247	225	225
R^2	0.511	0.659	0.729	0.745
Adjusted R^2	0.435	0.603	0.683	0.699
Residual Std. Error	5.191 (df = 213)	4.353 (df = 211)	7.875 (df = 192)	7.674 (df = 190)
F Statistic	6.745*** (df = 33; 213)	11.673*** (df = 35; 211)	16.106*** (df = 32; 192)	16.326*** (df = 34; 190)

Note: *p<0.1; **p<0.05; ***p<0.01

Table C.5: Fixed Effects on Governmental Events - Protest - 2

	Dependent variable:			
	Environment		Education	
	(1)	(2)	(3)	(4)
IT	7.076***	6.987***	−3.835	−3.413
	(2.497)	(2.094)	(4.100)	(4.009)
LG	6.190*	5.686**	3.400	6.607
	(3.251)	(2.727)	(5.322)	(5.270)
LH	5.614*	5.492**	2.879	6.128
	(3.290)	(2.759)	(5.366)	(5.311)
MT	1.856	2.231	8.127*	11.558**
	(3.037)	(2.573)	(4.711)	(4.717)
NL	0.619	1.204	−0.906	−1.002
	(2.472)	(2.075)	(3.865)	(3.766)
PL	7.061**	6.746**	5.893	10.110*
	(3.117)	(2.620)	(5.263)	(5.273)
PO	1.665	2.980	2.807	5.844
	(2.735)	(2.305)	(4.384)	(4.366)
RO	7.198**	7.604***	6.048	11.154*
	(3.265)	(2.739)	(5.711)	(5.756)
SI	5.588**	5.525**	0.532	3.158
	(2.720)	(2.280)	(4.444)	(4.396)
SK	5.201	5.824**	4.430	6.605
	(3.182)	(2.669)	(5.311)	(5.214)
Observations	247	247	225	225
R^2	0.511	0.659	0.729	0.745
Adjusted R^2	0.435	0.603	0.683	0.699
Residual Std. Error	5.191 (df = 213)	4.353 (df = 211)	7.875 (df = 192)	7.674 (df = 190)
F Statistic	6.745*** (df = 33; 213)	11.673*** (df = 35; 211)	16.106*** (df = 32; 192)	16.326*** (df = 34; 190)

Note: *p<0.1; **p<0.05; ***p<0.01

Table C.6: Fixed Effects on Governmental Events - Protest - 3

	Dependent variable:			
	Environment		Education	
	(1)	(2)	(3)	(4)
SP	4.098	4.109*	−1.767	0.196
	(2.564)	(2.179)	(4.070)	(4.005)
SW	−0.953	2.406	5.864	3.794
	(2.881)	(2.441)	(4.326)	(4.271)
UK	−2.404	−1.564	22.181***	24.170***
	(2.409)	(2.029)	(4.171)	(4.146)
LU	−8.753**	−9.857***		
	(4.381)	(3.683)		
Constant	−10.940**	−7.778**	−6.920	−17.693**
	(4.324)	(3.679)	(7.877)	(8.271)
Observations	247	247	225	225
R^2	0.511	0.659	0.729	0.745
Adjusted R^2	0.435	0.603	0.683	0.699
Residual Std. Error	5.191 (df = 213)	4.353 (df = 211)	7.875 (df = 192)	7.674 (df = 190)
F Statistic	6.745***	11.673***	16.106***	16.326***
	(df = 33; 213)	(df = 35; 211)	(df = 32; 192)	(df = 34; 190)
Note:				*p<0.1; **p<0.05; ***p<0.01

Appendix D

Appendix Chapter 7

Table D.1: MANOVA Results Including Speed

	Df	Wilks	approx F	num Df	den Df	Pr(>F)
Pub. Op.	2	0.990	1.796	18	6,504	0.020*
Pol. Dir.	2	0.989	1.956	18	6,504	0.009**
Speed	1	0.999	0.539	9	3,252	0.847
Issue	1	0.968	12.011	9	3,252	0***
Pub.Op.*Pol.Dir.	4	0.991	0.794	36	12,188.490	0.805
Pub.Op.*Speed	2	0.993	1.206	18	6,504	0.246
Pol.Dir.*Speed	1	0.998	0.792	9	3,252	0.624
Pub.Op.*Issue	2	0.998	0.443	18	6,504	0.979
Pol.Dir.*Issue	2	0.997	0.583	18	6,504	0.914
Speed*Issue	1	0.998	0.696	9	3,252	0.713
Pub.Op.*Pol.Dir.*Speed	2	0.997	0.620	18	6,504	0.887
Pub.Op.*Pol.Dir.*Issue	4	0.991	0.834	36	12,188.490	0.747
Pub.Op.*Speed*Issue	2	0.996	0.776	18	6,504	0.731
Pol.Dir.*Speed*Issue	1	0.997	1.064	9	3,252	0.386
Pub.Op.*Pol.Dir.*Speed*Issue	2	0.995	0.924	18	6,504	0.549
Residuals	3,260					
Note:	*p<0.1; **p<0.05; ***p<0.01					

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