

Too many cooks in the kitchen?

A cross-national study of how interest groups compete against each other to influence political parties' policy decisions.

Erlend Iversen Medhus



A thesis presented for the degree of
Master of Political Science
(33 094 words)

Department of Political Science
University of Oslo
Spring 2020

Abstract

In contemporary democracies are political parties and interest group vital in incorporating societal interests into democratic decision making. Groups are seeking to influence this decision making from the outside, while parties run for election and form governments to make the actual decisions. Parties are the gatekeepers of political decision making, and these are the gates groups seek to pass. What do we know about groups influencing parties, and what happens when groups aim for the same gates?

Interest groups' influence on political parties has been a rare scope in the literature. The majority has focused on influence over the policy outcome, rather than the actors responsible for the outcome. This thesis looks at political parties as the target for interest groups' influence attempts, and examine to what extent the patterns of competition between interest groups affects their ability to influence parties' policy decisions in the legislature. By looking at groups which operate in the same environment and how they interact with each other I construct the multidimensional concept of interest group competition, defining the competitive interaction between groups due to them occupying the same space. I then hypothesizes that competition in these environments reduces the influence which each group perceive to obtain.

While the results of the thesis show how interest group competition does play a part in the interest group – political party influence process, is it still a long way to go before the whole process is untangled. I propose that further research may build on this study, to further uncover the importance of group to group interaction in parliamentary democracies. With competition shown to negatively affect the groups' influence on parties, follows implications on group mobilization and parties' representation of interests.

Acknowledgements

The journey of writing this thesis has been eventful. Maybe a bit too eventful for my liking, but life is full of ups and downs. Dealing with them is the real test, and this thesis was no exception.

I would have liked to dedicate a whole chapter to the people who deserves a thank you, because there are many of you. But on top of that list are my supervisors Elin H. Allern and Vibeke W. Hansen. They have contributed with an enormous amount of academic guidance, but also with their belief in the project and firmly helping its progress. Their guidance were immense throughout these strange times of this past spring. Our discussions, both face to face and screen to screen was greatly valued, and future students should price themselves lucky if given your guidance.

Sung by Ringo Starr (and sometimes, more fittingly, Joe Cocker) is one of the worlds greatest songs perfect - to describe those who deserve a lot of my gratitude. Iselin, Helge, Alban and Marlene your help, presence and never declining another beer, have made the final steps of this thesis possible.

I get by with a little help from my friends, both those on and off campus.

Thank you.

Lastly, I want to thank my family. Do not worry if you feel you have not been able to help with the academic and technical contents. You are helping in all the right ways.

I take full responsibility for the content of this thesis, including any errors.

Contents

1	Introduction	1
1.1	Interest groups and political parties influence	2
1.2	Interest group competition	3
1.3	Outline of thesis	4
2	What do we know about interest group influence?	6
2.1	From the core to the periphery	7
2.2	Influence based on group level characteristics	8
2.3	Contextual factors: Institutions and issue	12
2.4	The missing piece, and parties as the key to policy outcome	17
2.4.1	Group and gatekeeper	18
2.4.2	Competition: a missing piece	21
3	Framework	24
3.1	Key concepts and core assumptions	25
3.1.1	Interest group rationale	26
3.1.2	Interest group - political party influence	27
3.2	Introducing interest group competition	30
3.2.1	Conceptualizing interest group competition	30
3.2.2	Interest group population	31
3.2.3	From density to competition	33

3.2.4	Dimensions of competition	34
3.2.5	Summary of concept	37
3.3	Where does density lead us?	39
3.3.1	The other side of the coin?	39
3.3.2	The relationship between competition and influence	41
4	Research design	44
4.1	The scope	45
4.1.1	The PAIRDEM sample	47
4.1.2	Transforming the data: go long, not wide.	48
4.2	Operationalization	53
4.2.1	Measuring the dependent variable: influence	54
4.2.2	Measuring the independent variable: interest group competition	56
4.2.3	Control variables	64
4.3	Ordinary least square with fixed effects	68
4.3.1	Diagnostics and robustness	69
5	Analysis and results	74
5.1	The analysis	75
5.1.1	Model 1: Interest competition	77
5.1.2	Model 2: Policy Area competition	80
5.1.3	Model 3: The alternative operationalization	83
5.2	Summarizing the results	85
6	Conclusion	88
6.1	Interest group competition reduces influence	90
6.2	Limitations and further research	94

Bibliography	97
A Appendix A: Robustness test 1: Robust standard errors	102
B Appendix B: Robustness test 2a: Reduced sample: USA	106
C Appendix C: Robustness test 2b: Reduced sample: PI	109
D Appendix D: Robustness test 2c: Reduced sample: Business/finance/employers assoc.	112
E Appendix E: Robustness test 3: Interaction models	115
F Appendix F: Group overview and response(PAIRDEM)	123

List of Figures

4.1	Histogram of the key variables	72
E.1	Interactionplot: Interest competition and group's position in country	121
F.1	Response rate by group type	124
F.2	Response rate by country	127

List of Tables

3.1	Conceptualization table	39
4.1	The triadic data structure exemplified	52
4.2	Perceived influence	56
4.3	Interest competition - frequency and density score	58
4.4	Policy area competition - frequency and density score	61
4.5	Key variables	64
4.6	Descriptive statistics	67
4.7	Assumptions of OLS with fixed effects	69
5.1	OLS analysis of interest group competition	76
5.2	Interest competition modulations	78
5.3	Policy area competition modulations	82
5.4	Group's position in country	84
6.1	Summary of findings	90
A.1	SE analysis: Interest competition	103
A.2	SE analysis: Policy area competition	104
A.3	SE analysis: Group's position in country competition	105
B.1	Interest competition with reduced and whole sample	107
B.2	Policy area competition with reduced and whole sample	108

C.1 Interest competition with reduced and whole sample 110

C.2 Policy area competition with reduced and whole sample 111

D.1 Interest competition with reduced and whole sample 113

D.2 Policy area competition with reduced and whole sample 114

E.1 Interest competition intersect group’s position in country 117

E.2 Policy area competition intersect group’s position in country 118

E.3 Interest competition intersect policy area competition 120

F.1 Group coding scheme specifications 125

Chapter 1

Introduction

Every day, all over the world, there are interest groups lobbying political parties, in an attempt to get their message across. Different policy areas in different countries have a multitude of supporters and their opposition. There are parties aiming for change, and there are parties opposing such change. It is the same story for interest groups. Groups are pushing and pulling, trying to influence the parties with their preferred outcome. The process is complex and the leap from popular interest to policy outcome is long. This is the case for almost every aspect of the policy spectre, from the most narrow local issue to the ones on the global scale.

Interest groups and political parties are central actors in contemporary democracies. Two types of actors which both act in the political sphere. The former is policy seeking and the latter is competing in elections, to change policy. Interest groups seeks to influence the policy decisions parties make, trying to influence the outcome.

The interest group influence literature has studied how organized interests tries to influence decision makers to get their preferred policy outcome. The focus on influence has been a recurring theme in the interest group literature, with maybe the most famous contributions dating back to Dahl (1963) and Truman (1971). The contemporary field of the literature has empirically proved several factors central in interest groups' ability to influence. Factors as: group characteristics, issue context, influence strategies and institutional context (Binderkrantz & Rasmussen, 2015;

Hojnacki, Kimball, Baumgartner, Berry, & Leech, 2012; Klüver, 2013; Otjes & Rasmussen, 2017). A common trend in the study of interest group influence has been the focus on policy outcome; “have interest groups’ influenced the policy outcome?”. The issue with this approach is that an aggregation of group level factors are used to explain the policy outcome, an outcome which is dependent on a multitude of factors outside the sphere of interest group influence. These approaches are also leaving out one of the main actors, the gatekeepers of the policy outcome: political parties.

I am proposing the concept of “interest group competition” to help untangle the complex influence process. I am looking at the political parties as the targets for the groups’ influence, in order to study how group to group interactions determines their influence. The research question is therefore:

Is competition between interest groups determining the extent of influence interest groups are obtaining over political parties policy decisions?

1.1 Interest groups and political parties influence

Interest groups and political parties are the main actors in the thesis, and are defined as following. For interest groups I use a broad definition: “An ‘interest group’ is: ‘(...) an association of individuals or organizations, usually formally organized, that attempts to influence public policy” (Thomas, 1993, p.7-8). For political parties, I focus on the parliamentary party groups (PPGs) which are defined as:

“an organised group of members of a representative body who were elected either under the same party label or under the label of different parties that do not compete against each other in elections, and who do not explicitly create a group for technical reasons only” (Heidar & Koole, 2003, p.249).

Group level characteristics are especially highlighted throughout the literature of interest group influence. These individual characteristics are seen as the different

means from which the groups as actors are able to influence policy outcome (Klüver, 2011). The characteristics can be grouped into: *strategies*, *resources*, *donations* and *membership*. The majority of these findings stem from the US-political system, but similar results have now also been found in EU and multi-party systems (Dür & Mateo, 2016; Farrell & Schmitt-Beck, 2008; Klüver, 2011, 2013). Contextual factors, alongside group level factors, are deemed relevant to influence. One of the topics falling between these two chairs is the literature on interest group collaboration. An elaboration on this literature is present in the following chapter. In this chapter, it represents the part of the literature which most closely resembles the theme of this thesis, with a focus on group to group relations (Baumgartner & Leech, 1998; Beyers, Eising, & Maloney, 2008; Browne, 1990; Newmark & Nownes, 2019).

Political parties have gradually been given more attention in the literature, with the shift towards multi-party systems. This shift has included studies on the relationship between groups and parties. The relationships, often studied through formal- and informal-ties have been the central element, rather than a strict focus on influence (E.H. Allern & Bale, 2017).

I am trying to contribute to both the missing pieces of parties as important actors in the influence literature, by looking at parties as targets for groups to influence. As well as limiting the scope of the explanatory element (interest group competition) when untangling the groups search for influence. Interest group competition contributes by broadening the understanding of the context which interest groups operate individually to influence.

1.2 Interest group competition

The framework of the thesis will mainly revolve around the concept of interest group competition. I am constructing the concept which can be used to study how groups interact with other groups when trying to influence. For this construction, I am drawing inspiration from *interest group population-theory*(Gray, 1996). The concept

also provides an alternative measurement to previous options of this relationship.

Interest group competition is seen as competition between interest groups competing to obtain influence over political parties policy decisions. The competition happens along two dimensions; an *interest dimension* and a *policy area dimension*. These dimensions represent characteristics of the groups' similarity to each other, trying to capture how groups operating in the same sphere interact and compete. The conceptualization in chapter three provides the following definition:

Interest group competition is competitive interactions between groups due to them occupying the same environment, which limits their ability to act, grow, and influence freely. The environment is limited and defined through the different dimensions characterizing the area and environment of the competition.

The dimensions are categorizing groups along the lines of similar characteristics as this is the key for the hypothesized relationship between competition and influence. The dimensions are measured with a density score, where the more dense areas are understood to be more conflictual. It is assumed that it is harder for groups operating in these areas to obtain influence, as there are more groups providing the "same" solution to the parties. This is represented in the main hypothesis of the thesis, discussed in chapter three.

Hypothesis: 1 Higher degrees of interest competition tends to reduce the influence each group have over political parties policy decisions. The more competition a group faces, the less influence it perceives.

1.3 Outline of thesis

The second chapter of the thesis presents a review of the literature. It looks at the traditional trends of the literature, and the contemporary findings. Drawing up the central factors for interest group influence which have received empirical support. The chapter concludes by discussing how this thesis will contribute to the identified

missing piece of interest group competition, and how political parties have been overlooked in the literature. The third chapter draws up the theoretical framework of the thesis. It establishes the central concepts, themes and assumptions. The chapter spends a long time on the conceptualization of the interest group competition. The result is a concept which is applicable for the analysis and answering the research question. And also contributing to future studies of influence, where interest group competition should be a relevant factor.

Following the theoretical framework comes the fourth chapter consisting of the research design. Here the data from the Party-Interest Group Relationships in Contemporary Democracies-project(PAIRDEM)¹ is presented, and the comprehensive transformation of the raw-data to the used subset is discussed. In the research design are all the variables operationalized, before the method of analysis, OLS regression is discussed. Chapter five contains the analysis, with the main models, alternative operationalizations and testing. The chapter tests the hypotheses from the framework, and discusses the result of the analysis in light of the research question. The final chapter concludes the results of the thesis, and discusses both limitations and possibilities of future research.

¹The PAIRDEM project has collected data through surveys, sent out to interest groups in seven different modern democracies in Europe and North America. See <https://pairdem.org/> for more info

Chapter 2

What do we know about interest group influence?

This chapter provides an overview of the literary contributions and empiric findings in the interest group influence literature. Starting with the overarching theoretical traditions which are regarded as the foundation of the field, before the chapter gradually turns its focus towards contemporary findings. The chapter is completed by a section with central overlooked themes and the missing pieces in the literature, where the thesis aims to contribute. Interest groups role and ability to influence public decision makers and policy outcome has been a central pillar in political science, playing a part in democracy-theory and representation. As the majority of these were based in the US, the traditional works are often focused on how interest groups affect the democratic system. The traditional literature has focused on the US-political system, while more contemporary scholars have focused on the European politics both at the national- and European-level.

The chapter starts with a brief presentation of the traditional trends of the interest group influence field. Looking at the different phases of the literature, before moving to the empirically supported factors in the influence-literature. The findings are categorized into subsections, starting with the group level characteristics, followed up by the structural- and contextual factors. The final part of the chapter looks at how competition between interest groups as a take on interest group relationships

has been overlooked. And how this can act as one side of the story, where the overlooked part on political parties in the literature can be the other. The following sections will try to provide a summary of the overarching literature, and while this is not a complete review, nor solely specific to interest group - political party studies. It will provide the main trends and findings, formulated in the arguments which colours the interest group influence literature.

2.1 From the core to the periphery

Interest groups were regarded as a key topic by political scientists in the studies of democratic systems in the sixties and seventies. Pioneers such as Dahl (1963), McConnell (1970) and Truman (1971) contributed on both interest groups' role in the political system and how their ability to influence policy outcome is relevant. With the American scholars studying the nature of representation in democratic systems, the role of interest groups ¹ was central. Interest group participation is also in more modern works aligned with democratic theory. Arguing that interest group enhances the democratic legitimacy of a political system, both with participation of citizens and its problem-solving capacity (Klüver, 2013, p.3)

The traditional lines of thought in the literature has seen the focus on interest group influence on policy outcome, move from the core, towards the periphery. From a key role in the school of the *group approach* by Truman (1971) and McConnell (1970), did the focus on interest groups shift away from representation, to mobilization in the *collective-action approach* by Olson (1965). The two different approaches have resulted in two general schools of the interest group influence understanding. Whereas the group-approach saw influence as indirectly provided in terms of information to widen the decision makers understanding of the interests of their constituents or technicalities surrounding standing proposals (Lowery & Gray, 2004, p.167). The collective action approach saw the interaction and attempt of influence as “...one of relatively simple and sequential transactions in a supermarket.” (Lowery & Gray,

¹(when applying a broad definition, including civil society organisations and special interest organisations (Klüver, 2013, p.5))

2004, p.167). The development of these trends can not solely be seen through their input on *influence*, as collective action for instance focused on the aspect of mobilization more than anything (Baumgartner & Leech, 1998).

The *neo-pluralist* phase brought with it a tradition of moderated pluralist view, which discarded the collective action perspective on influence. The neo-pluralist tradition points to how the legislative process is conditioned by preferences of the decision makers and their electorate/constituents, while the same can be said about the interest groups, constrained by their own structure and the structure of the interest community as a whole (Lowery & Gray, 2004).

Although these traditions draw up the development of the literature, they have lacked empirical support. The earliest traditions lacked both the methodological and analytic tools to support their arguments, and this is one of the reasons for the development of the literature (Baumgartner & Leech, 1998). Explaining a casual link between policy preferences of an interest group and the policy-making process, separates influence from pure luck - is both a difficult and demanding procedure (Klüver, 2013, p.7). This is one of the reasons for the missing empirically supported findings in the interest group influence literature. But contemporary contributions have provided immense progress, and their findings are discussed in the next sections.

2.2 Influence based on group level characteristics

By looking at interest group characteristics, has the literature been able to identify several explanatory variables for interest group influence. These individual level characteristics can be seen as different factors, making the groups more likely to succeed in their influence attempt (Klüver, 2011). The characteristics can be grouped into four categories: *strategies*, *resources*, *donations* and *membership*.

Interest group strategies are different methods which the groups apply to gain access (Binderkrantz, Pedersen, & Beyers, 2016). In the literature the jump between

access and influence is debated in the literature, and while a general notion supports that access is needed to obtain influence, is it not a necessity (Klüver, 2013, p.9). When it comes to obtaining access, these strategies have proved to be important tools for the groups. Strategies are classified by Binderkrantz and Krøyer into two main categories: direct and indirect, also known as insider and outsider strategies (Binderkrantz & Krøyer, 2012). The groups pick the strategies of their choice, and in terms of influence strategies are seen as conditioning factors along other group individual and relational characteristics. Dür and Mateo finds that business groups more often than their non-business counterparts choose direct strategies (Dür & Mateo, 2013, p.677-678). Binderkrantz and Krøyer finds that cause-groups target representatives of parliament and the media, while sectional groups target the government and the bureaucracy (Binderkrantz & Krøyer, 2012, p.134). The link between strategies and influence comes in the form of access. Groups might identify access as important to be able to influence, and the strategies would determine this access.

Dür, Bernhagen, and Marshall (2015) points to the differences in influence experienced in terms of group type in EU politics. The study is based on a considerable body of research which suggests that business interest are the most powerful non-state actors in capitalist democratic systems. These trends should hence be shown in the case of EU. For business interests, the access to the EU has been claimed as a central factor for this, with the institution framing a bias in favour of policies promoting market efficiencies. But this angle has also been contested, by pointing to how cause-groups seems to be particularly effective in influencing EU policies. One reason being the plethora of tiers comprising the EU government, increasing the number of access points, and therefore reducing the significance of the access obtained by business interests. Similarly, the cause-groups will gain the sympathy of the EU Commission as they strengthen the Commission's competences and legitimacy. Adding to this, Dür argues that both the increased politicization of several aspects of EU politics, which increases the public attention. And the growing powers of the European Parliament, supports the notion that business might not be so successful in their attempt to influence policy outcome in competition with

cause-groups. This argument is not conclusive though, and fits better for the EU narrative, than the US (Dür et al., 2015, p.955). And while the end goal of influence might not be the most successful measure of business interest activity in the EU, there still are several advantageous characteristics for the sectional-group type in the literature. Business interests command numerous politically useful resources such as money and expertise, which are often connected to access in the literature. And while access is not a necessity for influence - its relevance in the debate is more than present (Binderkrantz et al., 2016).

One of the most frequently mentioned characteristics related to interest group influence are the resources available for the group, and its organizational size. Resources can both be material; this could be financial, members, expertise and/or information the group holds. Well endowed groups should be able to allocate more resources into each issue, increase their engagement and devote more manpower to the topic (Mahoney, 2007). The argument is repeated in articles by Klüver (2011) and Binderkrantz and Rasmussen (2015). Focusing the argument on the groups ability to be active on the issue at hand.

Nevertheless, the empirical evidence from the resource-argument are indecisive. Mahoney finds that the resources of the group exhibit no clear relationship to lobbying success (Mahoney, 2007, p.51). Klüver on the other hand finds “...a positive association between resource endowment and interest group access to the European institutions” (Klüver, 2011, p.484). Binderkrantz and Rasmussen (2015) finds some support for the resource argument, but conditions the results with how interaction between resources and policy arena showing that resources are more important in terms of influence on the EU, than on the national level (Binderkrantz & Rasmussen, 2015). Several of the studies looking at resources combines the financial resources of the groups with their staff size to operationalize the resources-indicator (Binderkrantz & Rasmussen, 2015; Klüver, 2011; Mahoney, 2007). And these in interaction have been important for results, as Binderkrantz and Rasmussen finds that resources and staff size both work in combination and competition. They find that staff size is important for agenda-setting influence on EU policy makers, whereas

resource gains positively affects the increase from none to some influence on EU policy. Concluding that “...resources clearly play a strong role in pushing groups to exert some degree of influence at both national and EU level.”, with some conditions (Binderkrantz & Rasmussen, 2015).

An example of how interest group can use their resources, and a depiction of how interest groups work to gain influence is the topic of donations. Donations can be seen in campaign funding for political parties, with interest groups both seeking access and influence (E. Allern et al., 2019). Interest groups who are able to regularly donate large sums to political parties must obviously be recognized as important for these parties. Klüver exemplifies from the 2013 Bundestag election: *...the German FDP raised donations of about €10.9 million compared to income from member contributions of about €6.6 million and state funding of €10.5 million.* (Klüver, 2018, p.5). Such donations are needed to run successful election campaigns, and political parties seeking control over executive offices would want such supporting interest groups. And a circular argument can be drawn for the interest group able to support “their” political party to executive offices (Klüver, 2018).

Combined with the argument of resources follows the tale of membership. The members of the interest groups are the central factor behind which policy area the group focuses on (Holyoke & Cummins, 2019). Both characteristics signifies the strength and options the interest group can offer the political party, in line with rational choice and exchange-theory. Mahoney points to how membership size both provide legitimacy to policymakers acting accordingly and representation of citizen. And while these aspects might be important for policy makers, are her results once again indecisive: “...the memberships of an advocate exhibit no clear relationship to lobbying success” (Mahoney, 2007, p.51). An important condition mentioned by Mahoney is that the membership-base represented is significant. In systems where decision makers are democratically accountable are groups with non-sectional members met with a higher degree of responsiveness (Mahoney, 2007).

Klüver further specifies the electoral dimension of the membership argument. Mo-

bilizing their members to vote for a specific party is detrimental to electoral success. Interest groups represent different interests, and promotion of policies which would hurt this interest could lead the interest group to mobilize its members to not support the party at the next election (Klüver, 2018). Mobilization of members is one of the most influential tools an interest group can apply, and it is important for interest group to relate party policies towards their interest by “election touchstones” where groups questions political parties about their position on interest relevant issues - this to give the members indirect vote recommendations. The size of the group’s membership can be argued to be very “influential” for the political party, exemplified with the German farmers’ association which represents over 300 000 farmers plus their families - a significant electoral sector (Klüver, 2018).

Klüver finds that political parties are responsive to interest groups, and their voice is often louder than the one of the voter’s. Parties will more strongly adjust their policy agenda in response to mobilization by the interest group. And while interest groups are seen as intermediates of the citizens, are they given greater attention, corresponding to their degree of mobilization abilities, when it comes to shaping the policy agenda of the parties when they prioritize issues which are likewise important to citizens (Klüver, 2018, p.16).

2.3 Contextual factors: Institutions and issue

In order to understand why interest groups sometimes succeed and sometimes fail in their lobbying attempts, it is not sufficient to simply pay attention to individual group level characteristics.(Klüver, 2011, p.502)

The second section of the literature review tries to comprise the findings from the contextual factors affecting interest group influence. Contextual factors refers to their way of affecting how interest groups operate and act. When interest group influence is studied within only one system, or related to one issue, it is difficult to discover variance – but the in depth study of the context created by these contextual factors will contribute to the understanding of the source of interest group variance

(Klüver, 2013, p.10). Similarly to the link between interest group characteristics, will these contextual factors both be seen to moderate each other. The contextual factors can be categorized into four categories: *legislative process*, *contextual constraints*, *issue* and *elections*. The final parts of this section will discuss the relational factors with group collaboration as the main theme.

“The institutional context defines the opportunities for getting in touch with decision-makers and therefore plays a crucial role in the analysis of interest group influence” (Klüver, 2013, p.9). Lobbying is therefore often seen as an exchange relationship between decision-makers and interest groups (Klüver, 2013, p.9-11), laying the foundation for the use of exchange-theory in the literature. The difference in demand by the decision makers and the goods which the groups provide would vary in different institutional contexts and following that is variance in interest group influence over policy outcome (Klüver, 2013, p.10).

While the group type factor is linked to the individual level characteristic is it also conditioning for other factors (Dür et al., 2015). An example of this is the link between group-type and influence strategy. Interest group-type is a commonly applied when studying interest group influence. Interest groups are categorized into many sub-categories, with both economic-non economic and section- versus cause groups, being parallel distinctions. Business groups, which are studied by amongst others falls into the sectional group category. While group type and strategies are often seen in connection with each other are they studied individually and conditionally in the literature.

Another link to the group type-factor is the conditional effect with institutional structure, which also will be elaborated on later. Dür et al. (2015) summarizes the conflicting debate of the sectional vs cause influence by showing the contrasting arguments and findings of the debate. Some say that business actors are the single most powerful actor type in pluralist polities, while some say their political clout is limited (Dür et al., 2015, p.974). The findings of Dür et al. (2015) includes another condition, the one of *the status quo versus change* where systems pushing for change

results in lower degree of successful business interest influence. Degree of conflict is also conditioning the findings of Dür et.al., where low conflict issues are more often “won” by the business interest, while high conflict issues are “won” by cause groups (Dür et al., 2015, p. 974). The findings of Binderkrantz multi-level study of group type influence on the national versus supranational level shows how business groups appears more influential at the EU level, while no difference is found between the two group types on national policy makers (Binderkrantz & Rasmussen, 2015).

Where the policy question is located in the legislative process, is highlighted by several scholars as an important factor for both the *how's* and *how much* interest groups can influence. Who the interest groups focus their attention on is constrained by the placement of the issue in the legislative process, finds Crombez (2002). The findings show how different sections of the process has optimal influence actors, exemplified by how interest groups should support close allies in the initial part of the process. While the groups should turn their focus to pivotal decision makers when the issue is voted on in parliament (Crombez, 2002). Klüver studies the policy formulation phase in the EU Council and Parliament, and argues that the formulation phase is the most fertile stage to exert influence (Klüver, 2011). A clarification on this can also be found in Dür et.al.'s analysis where legislative instruments by the EU Commission or legislative procedures applied to the decision process is not related to the lobbying success (Dür et al., 2015).

Issue specific studies are important as contextual factors for interest group influence. Features as issue salience, degree of conflict, and the scope of the issue are seen to affect the variance of interest group influence (Klüver, 2013). One of the central arguments in the issue-specific studies has revolved around the search for policy change or keeping the status quo. Mahoney presents arguments pointing to institutional stickiness and that it is easier to keep status quo than move to a new policy equilibrium (Mahoney, 2007). A further complication of the contextual frame and characteristics of the policy issue at stake seems to affect the influence interest groups are able to exert. Klüver finds that interest groups targeting decision makers in a favourable issue context are more likely to succeed in their influencing

efforts, compared to groups in a disadvantageous issue environment (Klüver, 2011). The complexity of the policy issue is also important when looking at how political parties and decision makers opens the door on interest group influence. Challenging issues might require in-depth information which policy makers can get from interest groups. This means that interest groups have room to influence. But this influence room varies, depending on the complex nature of the policy proposal. Complex issues should lead to a higher degree of influence success by interest groups, while less complex issues have lower degree of influence success (Klüver, 2011). Another feature of the issue which affects influence is the distributive -, redistributive - or regulatory nature of the issue. Both of these arguments lack empirical support (Klüver, 2013, p.12). Issue salience also factors in and affects both success in influencing outcomes and strategy choices taken by groups. More salient issues are also found to comprise more actively engaged groups, which tend to expend greater efforts and sink more costs (Hojnacki et al., 2012). Highly conflictual issues will also affect the environment the groups are able to influence. Opposed to the simplicity of issues where the proposed perspective is unopposed. Different types of groups will also experience different success in interaction with conflict level, as Mahoney shows with civil society organisations. They are less likely to be successful in their lobbying, when the issue is highly conflictual (Mahoney, 2007). Media's attention to the issue is often argued to be of importance. But findings by Dür et al. (2015) shows that media attention is not related to lobbying success.

Elections and media are the last arguments included in this section on structural factors. The electoral dimension is closely knit to several important institutions in both the national and supranational political sphere and is obviously adding to the complexity of interest group influence understanding. In Mahoney's interest group study in Washington DC and Brussel, she points to how different electoral factors explain the results in the two cases. The absence of direct election combined with plenty of campaign contributions resulted in more compromises, where several interest groups were given partially preference attainment (Mahoney, 2007).

Placing the relational factors for interest group influence, is not a straight forward

matter. Interest group collaboration is a combination of their need to pool resources, form alliances as a strategy, be a (passive) part of issue coalitions or form coalitions due to the issue context. The relational argument of interest group coalition can wear many hats. Its placement at the end of this section, before the introduction is based on the need to understand the prior factors, and its relevance for the next section. Interest group collaboration literature is one of the closest fields of the literature to my proposed topic of interest group competition. An elaboration of the findings of the field is hence needed. Interest groups collaborating is also discussed in the influence literature, and is by some seen as a method to signal to leaders the width of their support and pool resources (Mahoney, 2007). Interest groups forming relatively large coalitions can expect to influence more if the issue is salient, while smaller coalitions can expect less influence in such a case (Klüver, 2011). Hojnacki (1997) finds that groups choice of joining in alliance with other groups is affected by among others the width of the issue at hand. When potential allies signal that their contribution to a collective advocacy campaign is meagre, the costs of joining such an alliance outweighs the benefits. On the other hand, when such a collaboration seems “pivotal” to succeed, the benefits of collaboration outweighs the costs (Hojnacki, 1997). Newmark and Nownes in their study of coalition joining behaviour highlights three key points in the literature supporting the importance of the coalition debate. Interest group coalition is a growing trend, now more common than ever. And coalitions is a functioning tool for the groups, they do affect influence on policy. Lastly interest groups view coalition joining as a very effective strategy (Newmark & Nownes, 2019, p.1284). The findings by Newmark and Nownes points to the importance of ideology in the interest group and conflict level when explaining why interest groups join coalitions. We can, for instance, see that liberal and moderate organizations more rarely join alliances than conservative groups. And for level of conflict, the more conflictual the issue gets - the more likely that interest groups will join coalitions (Newmark & Nownes, 2019, p.1294).

The findings presented so far are important to understand as both individually significant, but also relevant in combination. The interest group-influence field is complex due to both issues of operationalization and the interplay between individ-

ual, contextual and relational explanatory factors. Klüver discusses the complexity of the lobbying process and summarizes both the different factors needed to study interest group influence, both separately and in relation (Klüver, 2013).

2.4 The missing piece, and parties as the key to policy outcome

I will start with a brief summary of the chapter so far, before the next themes are introduced. The literature on interest group influence have found several factors explaining how interest groups are able influence decision makers. The factors can be categorized into group level characteristics, contextual factors, and relational factors. These groups are not mutually exclusive and some factors drifts between these lines, while many of the factors are also proven to moderate each other. The key findings shows how the groups' resources matter, and separates some groups as more influential compared to others. The context and salience of the issue matters, in strong correlation with factors as strategies for access and strategies of collaboration. For some issues are a set of strategies proven more helpful, while in others are forming alliances helpful. Where the issue is, the legislative process determines how successful groups are at influencing it, and in what type of institutional frame it is proposed moderates again how successful different group types, and group strategies are.

One piece which is lacking in the literature is a competitive look at group to group relations. An interest group as an unique organization operates in a given environment. This environment, in line with the factors presented above, is fair to assume is affecting how the group is operating and how successful it is at gaining influence. I am therefore presenting interest group competition as an explanatory factor to further help fill out the picture of factors determining influence.

With the focus on the factors trying to explain interest group influence in the literature, one could assess that the dependent end of this phenomenon also lacks

clarity. Policy outcome has acted as the goal which interest groups try to influence, in the majority of the studies discussed above. The studies has focused on issue-specific cases or they have been placed in the US political system where individual decision makers rule. But in multi-party system is it the parties which reign over to outcome. So to influence the outcome, one needs to influence the parties (E. Allern et al., 2019). It is easier to study the influence groups obtain, by looking at political parties as the target. The parties are the main targets for the groups, in their quest for influence, in most multi-party systems. Therefore, parties should play a bigger role in the influence group literature. The section below introduces the literature on interest group - political party relations, which has focused on exactly that, relationships between these two. It brings some clarity to the importance of these relationships in the influence process. Firstly, the main findings in the group – party relationship field is presented. Following that are the few modern findings on “lobby routines”, linking relationships and influence.

2.4.1 Group and gatekeeper

The main theoretical strand in the study of these relationships is “exchange-theory” where the relationship between the interest groups and political parties is determined by what the interest groups supply to the political parties in return for influencing their policy stance / input on the policy outcome (E. Allern et al., 2019).

Groups are able to approach political parties and decision makers through direct strategies. This is therefore a good point of departure. Parties can be seen as gatekeepers for both policy-making and their influential role over elected officials, and are hence very valuable targets for interest groups to focus their action towards (E. Allern et al., 2019). The relationship between interest group and political parties is for instance empirically proved in Giger and Klüver (2016) finding a higher probability of success when targeting parties, opposed to individual MPs. The literature conceptualizes the relationship between interest group and political parties into five different dimensions, where the scholars vary in their view and understanding of the relationship (Elin H Allern & Bale, 2012, p.13). The “*contact-dimension*” is one

of the most popular understandings comprising formal vs informal versions of communication between interest groups and political parties. Relating to “contact” are the “*material-*” and the “*ideological-dimensions*”. These two are both understood as individual, mutually exclusive dimensions, or as supplementary indicators in the “contact”-dimension. These two dimensions are more specific in their understanding of the relationship, pointing to specific characteristics of the relationship. The two last dimensions are “*strategical*” and “*power sharing*”, which focuses on strategies interest groups use to obtain influence and the power dependence between the actors. Along with these five dimensions are the terms of closeness and range, and integration versus non-integration commonly applied in the description of the relationships. Closeness says something about how close relationship the parties have with the groups, and range with whom the parties are involved with (Elin H. Allern, 2010, p.37). Integration versus non-integration is similar to formal and non-formal and is used to describe the type of interaction between the groups and parties (Elin H Allern & Bale, 2012, p.11).

In Holyoke and Cummins (2019) analysis of group-party influence on public spending and debt they find that when one party dominates the government, they will enhance their coalitions with more groups by offering more spending. So group influence in these cases are partially conditioned by the degree of group-support needed by the legislator, and they show that party competition reduces interest group influence on public spending (Holyoke & Cummins, 2019, p.16).

Towards whom interest groups focus their attention can be seen through their ideological relation with the decision maker, or through the *friend or foe* lens. Scholars studies both to see which actor groups should focus their influence effort towards. Hojnacki and Kimball finds that groups which aim to change current policy would want to broaden their lobbying efforts and base of legislative support and hence target both allies, opponents and the one undecided. While the opposite scenario also is given empirical support. Groups which aims to maintain the status quo are targeting friendly legislators, exclusively (Hojnacki & Kimball, 1999, p.1000). Salisbury et.al. discovers that an overwhelming majority of the groups studied are

able to identify their opponents in the legislature, and a clear evidence of interaction between group type and this identification is found. Studies of these networks among interest groups and decision makers finds that labour groups are more often than business groups identifying their adversaries. The large groups and coalitions in these two groups see little to none interaction cross group-types, while individual groups in the same categories are slightly less implacable foes (Salisbury, Heinz, Laumann, & Nelson, 1987, p.1224-1228). By studying advocates and policy makers at the WTO Ministerial Conferences and United Nations Climate Conferences in 2012, Beyers and Hanegraaff finds that groups focus their attention on like-minded policy makers, while their opponents are given much less attention. Variation in the findings are explained by, among others, issue salience, group characteristics and the democratic reputation of the groups country of origin (Beyers & Hanegraaff, 2017).

Ideological proximity between interest groups and political parties, can be drawn in a corresponding argument to *friend or foe* support. Otjes and Rasmussen analyses parliamentary groups in Denmark and Netherlands, and finds that the left-right axis is telling for the collaboration between group and party. Interest groups which place themselves on the left of the axis prefer to cooperate with parties on the left, and the same is true for groups and parties on the right. In Denmark, where the government alternates between left and right, this relationship is weaker than in Netherlands - as the interest groups needs to, continuously, relate to parties on the whole spectre (Otjes & Rasmussen, 2017). Studies of the interest group influence in the European Parliament show that ideological preferences affect which interest groups cooperate with which parties, and that issues which are especially controversial the findings show that the groups and parties cooperate along the ideological cleavages (Beyers, De Bruycker, & Baller, 2015).

The view of ideological proximity is also contested both through studies focusing on individual legislators, where the findings are showing that successful lobbying is often not about changing the mind of legislators but focusing on the likeminded (E. Allern et al., 2019). A found which is not confirmed in the EU parliament, by Marshall (2015). He shows that interest groups tend to focus their influence strategies

towards ideological counterparts where the pattern of voting and coalition outcome seems unclear.

Systematic and in-depth analysis of the interest group - political party sphere is marked by the studies of “lobby routines” and is spearheaded by, amongst others, the works of E. Allern et al. (2019), Marshall (2015), Otjes and Rasmussen (2017). While the factors mentioned above mostly exemplifies the relationship between groups and parties, are studies on lobby routines looking at how this relationship is applied by the groups to obtain influence. In these studies are the factors as ideological proximity and relation further highlighted. Indicating an important factor. The contributions on how interest groups are influencing political parties are not dominating the literature, as proven here. With this study of interest group competition will I try to further contribute to this part of the literature.

2.4.2 Competition: a missing piece

The only solution is to break the monopoly, introduce competition and give the customers alternatives. (Friedman, 1983)

An identified missing piece literature is knowledge of the environment where interest groups interact with each other, in their attempts to influence. The literature on this topic is lacking, and the existing literature seem to have hindered further studies. Salisbury et al. (1987) has provided an interesting introduction to the field. By looking at interest group interaction networks, he identifies that there is conflict. Similar groups are competing for the opportunity to get their own message across. But in Salisbury et al. (1987)’s study are they also showing that this conflict does not play out, and groups are rather prone to divert to even more narrow interest niches. Even though the competition is not played out in an actual sense, the studies have found that groups do compete against each other. This competition differs in several senses, with some known factors explaining differences. For instance are there differences coming from group characteristics:

Trade associations and specialized producers are not simply smaller nar-

rower segments of a larger class or sector. They often have different goals and operate in different ways...(Salisbury et al., 1987, p.1230)

Another interesting find is that that the groups perceive the political context in the domain they operate in, and this perception structures the interactions of conflict and cooperation in that domain. So Salisbury et.al. does provide support for the notion that groups as individual actors in a natural state are competing against other groups. This competition differs due to different goals the groups have. And the groups as individual actors are doing calculated strategical choices based on their perception of the political context and their surroundings.

Browne (1990) highlights previous research on how patterns of interactions among interest groups confirms a notion of competition for policy attention, in multiple domains where groups have divided policy goals. But Browne adjusts these founds by finding that actual competition between groups seems to be resolved, rather than played out. By the use of exchange-theory are the groups identified in specific and recognizable identities, which occupy issue niches. In these niches, he finds that groups only infrequently ally themselves with or become adversaries of other interests. And the interests more often accommodate one another, due to a very narrow issue concentration. Larger, sector wide - organizations tend to become coalition players.

The focus on specific interest niches and pluralist structures are clear in both contributions. They differ in the exact view of competition and interest group relationship. And tend to use a groups positional awareness indicator to discover how many groups are interacting with each other over the “same” issues. What is clear in these studies is how interest group interaction is preceding contact and influence attempt towards decision makers. Outright conflict is not supported, and collaboration seems to be the case which is observed more often. The patterns of interactions are tied to pluralist patterns, and the most intense interactions are traced to multi-purpose groups (Browne, 1990; Salisbury et al., 1987).

While not being able to have perfect oversight of the interest group influence literature, I can state that that the two contributions from Browne (1990), Salisbury et al. (1987) are the few I have found on competition between groups. And their findings of consolidation and compromise might be one of the reasons why the topic has not been given more attention. Both the contributions are based in the US system, looking at individual decision makers as targets for the influence. This is arguably one reason for studying this in a multi-party system, where political parties are the target for the groups' influence attempts. Another argument for the importance of interest group competition is the individual actor perspective. In the majority of the factors trying to explain influence are different characteristics and contexts used to explain the policy outcome, which arguably is on an aggregated level to these factors. By building on the knowledge of Salisbury and Browne, looking at interest groups as individual actors relating to each other, in their targeting of political parties - the missing piece tries to cover an "actor-angle" of the issue. This also creates a significant difference between a competition and cooperation. Competition as the missing piece looks at the environment where the groups operate, while cooperation is a strategic choice groups take. Turning the tables on the groups, the parties are on the receiving end. It is fair to assume that parties identifies a "collection" of groups representing a interest. Parties in a party system are both in an electoral competition and a party to party competition, it is not sure that they identify the optimal uniqueness of groups and every specificity of their niche. When Salisbury showed that groups have a perception of the political context, an irrational conclusion would be to not recognize the parties point of view.

The theoretical assumptions follows in the next chapter. This section has discussed how interest groups as individual actors are in a natural state of competition. Interest group competition is identified as a missing piece in the puzzle of how groups obtain influence, and the next chapter will conceptualize this missing piece to study if it can act as an explanatory factor.

Chapter 3

Framework

This chapter will present the theoretical framework of the thesis. The framework maps out the main theoretical concepts and their importance in the construction of the dependent variable and key explanatory variables. The previous chapter presented how interest group influence is studied and which findings are shown in the literature. I highlighted the missing piece of political parties in the literature. It concluded with the introduction of interest group competition. As there is no clear cut theoretical approach to the study of interest group competition will this chapter provide a thorough construction and specification of such a framework. This with the aim of creating a theoretical framework with both analytical use, and further relevance in the interest group influence literature.

How can competition between interest groups affect the groups' influence on political parties' decisions? The different keys to unlock this question will make up the sections of the theoretical framework. The chapter begins with a brief discussion on the current state of the "group-party influence"-sphere, which is followed by a section on assumptions made of interest group rationale. Then follows an introduction to interest group competition to create an initial understanding of the topic.

The main section of the chapter delves into the conceptualization of interest group competition, primarily drawn from interest group population theory - combined with assumptions from rational-choice theory. The clash between the two theories are dealt with by replacing traditional exchange-theory from rational-choice with “surroundings and area density” cues from population theory. After the conceptualization follows the hypothesis development of, with contesting theories to ground the null-hypothesis.

3.1 Key concepts and core assumptions

The assumptions I make on interest group rationale and how interest groups can influence political parties’ decisions are the two central topics to be discussed here. These are topics are central as they make up the basis of the conceptualization of interest competition. By mapping out how the actors are assumed to act and what they aim at achieving, is a clear picture of the actors’ role created.

When dealing with actors actions, the assumptions from rational-choice theory provides us with a sturdy framework. The rational choice approach sees behaviour as purposive, the actors have goals and intends, by their choices, to achieve these goals. This goal-based perspective, differs the rational choice approach from sociological and psychological approaches to behaviour (Fiorina, 2001, p.12760). Interest groups have political interest, are organized, but opposed to political parties does not strive for public office. The thesis assumes that both the interest groups in question and political parties are rational, goal-oriented and purposeful actors. They seek a fixed set of ordered goals (Klüver, 2013, p.25). The school of rational choice moves into different subfields of political science, as well as other schools of thought, and hence the scholars differ on its usage and contents (Fiorina, 2001).

Interest groups’ interactions with other groups and their interaction with parties are of highest relevance in this framework, and hence is the framework’s place in rational choice theory apparent. In traditional exchange-theory are the relationship between

the groups and parties seen as a transaction where the groups provide electoral support, donations, information, their members, media relevance and causes of broad public appeal, in a theoretical exchange for influence (Binderkrantz, Christiansen, & Pedersen, 2015; Klüver, 2018). This framework adds to this notion. Remembering the importance of the resources, etc. which are exchanged for influence, it proposes the importance of the environments where groups operate. This shifts the strict focus on traditional exchange towards “area density”. The understanding and use of density is further discussed in section 3.2. The framework builds on rational choice-theory, with the actor focus in mind, applies the knowledge from exchange theory, and adds to this with the framework of the concept and its assumptions.

3.1.1 Interest group rationale

To understand why groups try to influence political parties, the understanding of their rationale is at the core. The framework, and the following analysis, makes assumptions on interest group rationale, and to ground these is the need for establishing what groups are and how they work present. The thesis’ applied definition of interest groups follows:

“An ‘interest group’ is: ‘(...) an association of individuals or organizations, usually formally organized, that attempts to influence public policy”

The definition used is broad, and includes almost every organised group which is participating in the policy sphere, focusing on public policy. Groups’ attempt to influence public policy can be further elaborated on by exemplifying the different arenas interest groups seek to get their interest represented. Through influencing agendas of political parties, the government, the bureaucracy and/or public, the interest groups seek to get their preferred policies approved. While political parties run for office, interest groups chase an indirect route towards the policy outcome: trying to influence party decisions. This is due to them representing a member-base/business/etc. in a preferred stance on a policy issue. This representation is either their main cause, their business, their preferred interest, or similar. How

the groups go on about these influence attempts are seen in their strategies, and moderated by external factors. There are also variations in the groups' cause of action cross interest, group type, issue area, etc.

3.1.2 Interest group - political party influence

Political parties are the gatekeepers to political power in most contemporary democracies. Responsible for the decisions leading to the policy outcome. Interest groups cannot make policy directly, but seek to influence political parties to influence their decisions leading to policy outcome.

“Interest group strategies” is a central part of the interest group influence literature. Looking at the different strategies groups deploy to reach out, get their message across and influence political parties. But some general classifications are borrowed to help our understanding of interest group - political party influence. *Insider strategies*, where the groups try to obtain direct contact with decision makers - provides a tool for studying how and why groups gain access to decision makers.(Dür & Mateo, 2013). Without access to the parties, the groups will find influencing very difficult. Access is often seen as a necessity, but not sufficient on its own. Expressing a view, might not change the view of the receiver. Similarly will access not guarantee influence of political party decisions, but it is often seen as a crucial step. Access is defined by Binderkrantz as: “...instances where a group has entered a political arena, passing a threshold controlled by relevant gatekeepers”. Studying access has shown which groups are on the radar of crucial political actors, the parties in this regard, and are compared to groups which are off this radar better set to influence the decisions of the policy makers(Binderkrantz et al., 2016).

From having gained access, the groups might be able to establish *lobby routines*. Here the arguments from traditional exchange-theory, with resource transaction in centre, are combined with key effects such as power status and ideological proximity. Interest groups can establish both formal and informal “routines” with political parties. Lobby routines, as the formalization of such bonds are called, are established

by groups which are trying to obtain loyal agents in the policy process (E. Allern et al., 2019). The understanding of these routines is that they are multi-faceted, but primarily coloured by the actors' understanding of power and ideology. And that these routines are varying in effect for both sides determined by especially the relevance of ideological connection between the groups and parties. These arguments are seen in combination with the resource argumentation which has dominated the literature, and which obviously not only when looking at when parties want to work with groups, but also lobby routines (E. Allern et al., 2019). While power-status of the decision maker at hand is important and ideological proximity also plays a part, is the *friend or foe* discussion important. Studies, for instance in the European Parliament finds that groups tend to focus on friends, while the more rational might would have been to target foes - to stay on the side which wins and takes/retains power (Marshall, 2015).

The previous chapter mentions influence in Dahl's traditional definition of "power". But for studying influence in the interest group - political party relation, is a higher level of precision needed. With the use of Michalowitz (2007, p.134) definition of influence, which is a weaker form of power where "an actor is being persuaded to pursue a certain course of action even if they initially did not wish to do so". The link to Dahl's definition of "power" separates this definition from preference attainment, as actual needs for action is necessary for the groups in order to persuade the parties to change or stand firm on their policy decisions. Preference attainment, on the other hand is when the actors obtain their preferred outcome, which can happen with or without action. The preferred outcome can occur due to a number of reasons, and interest group persuasion, or involvement at all does not need to be one of them. Lowery and Gray (2004) has *influence* as the last stage in their *influence production process*. After the initial steps of *mobilization*, *population* comes *access*, before *influence*. This indicates the different steps of an interest, to a group, trying to get access, in terms to be able to influence. As mentioned earlier is access a widely discussed theme, and is not a necessity of influence. Nor is it necessary for the understanding of influence needed here. Influence here builds on the definition by Michalowitz (2007), as it influencing policy is the goal of the interest groups, and

a basis for how I see groups as individual actors in this thesis. They seek to influence political parties policy decisions, and this is their goal. Groups not being able to do so, fail their primary rationale. But the definition needs some moderation, as the process of influencing is highly complex. This process often falls under the name of the lobbying process between interest groups and political parties. And it is here the definition falls short as it focuses on the outcome, solely. It is close to impossible to know exactly why decision makers end up taking the decisions or position they do. So to only understand influence as the final output would discard any possibility of studying influence on a larger scale, than single issue cases. The choices behind such actions can for instance be coloured by different lobbying activities, popular opinion through polls or media, or internal party pressure. Hence is looking at groups preference attainment an understanding of influence which broadens the space of observation. This means that this understanding of how the final policy reflects the interest group's preference, is the observations of the groups preference attainment. And not the influence the groups are exerting, in the definitions based on the traditional understanding of "power". The methodological difficulties of this application will be handled in the next chapter.

Groups approach political parties to influence their decision making. The common findings of the literature points to different ties and routines (both formal and ad-hoc) the groups and parties establish with the group's goal of gaining access. The groups do this by primarily deploying insider strategies, as these are targeting the parties directly, opposed to outsider strategies. Political parties, as decision makers, are key targets for the interest group to focus their influence efforts with policy contribution, or keeping policy of the agenda. Similarly are interest groups a key for securing votes for or against proposed policy (Binderkrantz et al., 2015; Klüver, 2018).

Along with the strategies, which focus on the group-party interaction, are surrounding factors affecting both the success of these interaction and the influence groups perceive to obtain. Factors as: group type, ideology, power status and friend versus foe are mentioned here, and in depth discussed in the previous chapter. Parties are

the gatekeepers of policy decisions, and this is why they are targeted by groups. But why are interest groups interested in influencing? This is the topic of the next section.

3.2 Introducing interest group competition

Interest group competition has mostly been an overlooked topic in the literature. Interest group competition aims at studying and describing: *the competitive sphere of interactions between the groups*. This sphere is based on the groups as individual actors, operating in a certain environment with surroundings and a political context (Salisbury et al., 1987). A common approach to competition has been to reverse the understanding of collaboration, where then the opposite is competition. But as competition comes from groups interacting in the same environment, is collaboration a strategic choice out of this competition. Competition and collaboration is hence not two sides of the same coin. Therefore I argue that it is possible to observe degrees of competition in the sphere of interactions between the groups.

3.2.1 Conceptualizing interest group competition

The conceptualization of interest group competition that follows, is based on the method borrowed by Gary Goertz. The aim is to deduct knowledge from literature and contribute to the theory. Goertz presents a structured way of doing this through a *three level concept-table*. The first part of the table, the basic level: is the overhanging concept. The secondary level presents the central themes, while the indicator level represents the indicator depicting the central themes. The three levelled understanding of the final concept is the achieved outcome of the conceptualization (Goertz, 2012).

Interest groups aim to influence political parties' policy decisions, and behind this action follows a key assumption: that there is competition amongst the interest groups on their way to reach this goal. There are many groups, and while they represent the same thing, is it not certain that they want the exact same output.

To anchor this assumption in theory and give the concept its theoretical foundation, the thesis turns to *interest group population theory*. This literature uses terms from biology to describe the development of interest group population. I will deduct how interest groups relate to each other, from their primary goal of survival to their actions as policy seekers. The theory positions the conceptualization in a focus on the environment surrounding the groups. How interest groups relate to each other is used to understand the competition between the groups and providing the secondary level of the concept in the conceptualization table.

3.2.2 Interest group population

Interest group population theory applies the theoretical arguments of survival in population ecology and explains both the development of populations and how species in populations relate. Interest groups are then thought of as the different species which struggles for survival. This struggle shapes both the area of operation and actions of the interest groups, and provides knowledge of the interactions between the groups.

From the theory's description of survival, with concepts as competitive exclusion principle, density and diversity are the main strands for the secondary level of the concept drawn. Those three concepts grounds the assumption of competition and how it creates hooks for the indicators. This section starts with an ecological overview to create a baseline of understanding. Before the main theoretical strands are elaborated on.

...the driving force motivating ecological interactions is the competition arising directly from the scarcity of resources within an ecosystem.

(Gray, 1996, p.42)

Population biologists notes how the competition over finite resources is directly linked to the survival of species (Gray, 1996, p.42). Secondly this competition is understood to be between the species competing over similar resources. Species competing over different types of resources does not compete against each other, in

the same manner of survival. In the world of biology the observation of direct combat in these resource competition is rare, and the solution is more often avoidance and partitioning. Resulting in several niches, where the species who are surviving - are thriving (Gray, 1996, p.42).

Scarcity of resources defines the competitive element of interactions. *The competitive exclusion principle* describes how competition for scarce resources leads to partitioning, and that some out-compete others for the same resources. In an ecological manner would this mean the transformation of species and their evolution. The principle is observed in given spatial areas, and in that area is hence the measure of *density* important. Along with density, follows concept of *diversity*, in the population theory. Diversity aggregates the competitive exclusion principle from the ecology literature to the organisation literature. Density is seen as the amount of organised interest occupying a specific area, while diversity is the categorization of the organised interests into recognizable categories (Gray, 1996). Both density and diversity is used when studying interest group populations, mobilization and other traditional trends in the interest group literature. To connect density and diversity to the thesis application of interest competition are they explained through the lens of *Energy-Stability-Area Theory of Biodiversity*(ESA-theory). ESA-theory can be summarized as “the more solar energy the greater diversity; the more stable the climate...the greater diversity;...the larger the area the greater diversity” (Lowery & Gray, 1995, p.7). With ESA-theory looking at the finite resources in a spatial and temporal frame, can this be translated to the organisational-sphere. There the need for energy, stable temporal frames, and space to thrive, can be translated into resources, political stability, organisational stability and space to operate for interest groups. Needs which might not go uncontested.

The competitive exclusion principle and ESA-theory describes the mechanisms found in the ecology of species where survival is at the core. The application of these terms provides a baseline foundation of the competitive assumption made of the relationship between interest groups. Similar species, or groups which they are in this case, are seen to compete for the same resources as this is their need for survival. Groups

who are out-competed are either doomed, or partitioned to sub-groups or other diversification. It is this relationship between density and diversification which the optimal amount of groups per area and diversification based on the competition over these resources which the ecology and population literature seeks and describes (Lowery & Gray, 1995).

For the theoretical framework of the thesis is especially the concept of density central. Density provides a description of the amount of interest groups occupying different areas. These areas have a finite supply of resources, and it is this amount which initially defines how many groups who can occupy this area. This means that density is one of the keys in understanding how interest group competition can be studied empirically. Diversity relates to density with groups having to narrow their resource- and area-occupation. The diversification then can be seen as a result of the competition between the groups, and give descriptive explanation of the area. Moving away from the question of survival, and even the question of partitioning and resulting diversification the framework is left with the assumption that the modus operandi of groups has a clear competitive side. With this competitive side being depicted through the area the groups operate, and hence would density of that area tell the intensity of competition.

3.2.3 From density to competition

Density, the amount of interest groups occupying the same environment, is the main argument for the assumption of competition between the groups. This hence makes up the secondary level of the conceptualization table. Then comes the need to specify these environments where the density can be observed. Such an understanding will provide the concept indicators. Specifying these environments can be done by looking at them as different dimensions. These dimensions are found by looking at interest group systems and party systems. Party systems are clearly defined and is given plenty of attention in the literature, the same can not be said about interest group system. But the general understanding is that interest group systems are made up of the population of interest groups and their interaction with each other.

To describe the environments where interest group competition is observed, I try to draw knowledge from seeking unity between party systems and interest group systems. The following subsection maps out two dimensions where interest group competition can be observed. The result is a description of the environments where density and hence competition are observed. These dimensions will act as indicators on the indicator-level of the conceptualization table.

3.2.4 Dimensions of competition

The system of interactions between political parties, mutually competing or cooperating is the definition of a party system. There needs to be more than one party, and these interactions between the parties occur in patterns, form familiarity and are reasonably predictable. Party systems are in their most common way classified through the numbers of party in competition (Laver, 1989). But the classification is given more depth and insight, with the ideological distance applied by the classifications developed by Sartori (Mair, 2015). This approach is similar to the insight provided by the cleavage-structure from Rokkan - and the development of looking at party systems as the competition between political parties, on a set of salient policy dimensions. These different policy areas these dimensions links to, where parties compete are helpful for the understanding of party to party interactions. They are also shining light upon the way parties act in the legislative system, where the primary day-to-day interaction between the parties occur, or the electoral system where the politics of the electoral competition occurs (Laver, 1989).

Interest group systems does not have the same clear cut definition as the party systems. The main reasons for this is that there is no complete overview of the population, and as some groups neither relate to party positions or ideological stances are they difficult to place in a system. These reasons might also explain the lack of systematic interaction studies between the groups. With out further expanding on this issue, the goal of seeking unity between the two systems is present. A helpful tool, understanding that some groups are then lost in the categorization, is the policy dimensions which the parties are distributed upon. Using this to draw up a

system, with a distribution similar to the parties in a party system “removes” the groups which are not relating to such issue salience dimensions. Political parties distributing across these dimensions provides a baseline-understanding of how parties are positioned vis-a-vis each other. And this same baseline is helpful for the thesis. Creating a similar understanding of the interest group systems, the thesis views the system as the interactions between interest groups, mutually competing or cooperating - and further classified upon different dimensions where the distribution of the groups can be observed. This presents a need for categorizations of the environments where similar groups operate, as it is in these categories(environments) the competitive interaction is assumed to take place. The amount of dimensions is unclear for both systems, and the understanding of these dimensions are also discussed. In the party system, the most common are linked to the cleavages known from Rokkan (Mair, 2015). For interest groups I draw up two dimensions where the interactions can be observed, and the groups can be categorized. There are most likely other types of dimensions where the interactions between groups can be observed, drawing from the understanding that the amount of dimensions in the party system is not even clear. The two dimensions are: *interest* and *policy-area*.

The first dimension depicts the unique interest which the groups represent. This could be “women’s rights issues”, “business”, “Ozone-protection”, etc. This dimension represents the most intuitive way to approach interest groups, as it depicts the primary observation of the group, and the core of their presence. Compared to political parties who often occupy several positions on a spectre of issues, and rarely represent only one interest (Mair, 2015): the first dimension differentiates between party systems and interest group systems. On this dimension only the groups which occupy the same position are observed, resulting in several sub-dimensions where similar groups are positioned. An issue with this dimension is the complexity of niches and uniqueness of the interest groups. This translates into the issue of interest group population, where a complete description and overview is not available - or to say possible. As mentioned by Salisbury et al. (1987) are interactions between groups in a conflictual manner avoided due to the uniqueness of the groups and the diversification of interest. This observation, as mentioned earlier, might be one of

the reasons why competition between interest groups is overlooked. While both in an empirical manner, and from a party-group perspective will groups be seen as similar. Due to this is it interesting to study same interest groups in the light of density, and how this affects contest in these areas. Groups identify in the same categories in empirical surveys, and try to influence the same policy decisions. An argument for uniqueness between the groups and complete diversification with very narrow niches can be made. But is equally plausible to argue that groups which represents similar interests, or aspects of interest are treated as “same-interest” groups.

The second dimensions looks at the policy areas where the groups are active. The dimension encapsulates then a larger variety of groups, with different interests. This dimension could categorize a larger amount of groups and is tied more closely to the traditional salience dimensions of the party system. The dimension consists of groups which are active on the area, and does not limit to interest representation alone. This also indicates a shift from the groups perspective, once again looking back at Salisbury et.al.’s who pointed out that groups have a perception of the environment they operate in and the political context. A given policy area might comprise a multitude of interests which are active on this area, and the political context might have a completely different form than the one of the *unique interest*. Exemplifying the areas in the dimensions can easily be done by looking at traditional ministry structures, in Western-democratic. Areas as “agriculture”, “energy”, “justice”, etc. There might be interest groups which have interest which correlate highly with these areas, and there issues on these areas which draws other interests to these areas. A central differing factor between the policy area dimension and the interest dimension is the increased complexity of the former. As the interest dimension argues the uniqueness of interests and sees that the environment the groups interact in here is strict. The policy area dimension might see more moving parts, as the dimension sees variance in issue salience, issue attention, political party positions and established versus non-established groups in that area. This means that factors like group-party relationship and issue salience could colour the actions of the dimension in a larger degree, compared to the interest dimension. The policy area approach is common in both the literature and the every day approach to political

actors. Highlighting the relevance of this dimension.

The position interest groups take on the policy area dimension is most likely linked to the interest they are representing, but it is the total complexity of the axis which colour the dimension. The axis will consist of a multitude of groups, and they will make up the density on that axis. The dimension, inspired by the cleavages structured in party system conflicts indicates that the dimension will have several moving parts as it is looking at the combination of the two systems. Mechanisms both between groups, between parties and between groups and parties could take place.

3.2.5 Summary of concept

The following sections of this chapter present a summary of the conceptualization so far, and present the concept.

The establishment of interest systems provides a baseline understanding of competition between interest groups. A competition needs participants, an area to compete, a set of rules and a goal to reach. The three first aspects are provided with the understanding of interest group systems. The goal of the competition, and the main motivation for the participants(as deducted from their rationale) is to influence political party decisions. The competition is therefore difficult to view as a winner takes all, and grading the win is more relevant than a dichotomy. Following from this is the assumption that the groups which indicate a high degree of influence can be seen as the winning group, and as this has to be in relative terms to the groups they are competing against.

Interest group density is the amount of interest groups occupying a given space. That space is in the population-theory viewed as niches. The translation of these would often be seen as the different interests or policy areas the groups occupy. The degree of narrow specification of these areas can partly be found in the diversification-part of the literature. And finally, how can density be studied in the interest group sys-

tem? By borrowing the dimension-aspect from the party systems, will the concept tie dimensions to the interest group system from which it can observe density. In the thesis, two dimensions are drawn up: *interest*(i) and *policy-area*(ii). Competition between groups as a whole would be difficult to discover, and therefore are specified dimensions used. It is of course possible to draw up other dimensions, or specify the given dimensions in other manners. This is briefly discussed in the final chapter of the thesis.

Interest group population theory, political party systems versus interest group systems, interest group rationale and interest group - political party influence are the main topics behind the conceptualization of interest group competition. From interest group population theory comes the understanding of density, which indicates competition as it tells the amount of groups operating in the same environment. Density is the basis for the secondary level of the concept. The degrees of density determines the level of competitive interaction in that given interest/area. Then comes knowledge from the other topics, and creates the indicator level, where the creation of the two dimensions where competition is observed. The interest dimension(i) represents the specificity and individualism of the interest group rationale, not seeking office but fighting for their cause in the political realm. The policy area dimension(ii) looks at groups which are active on specific policy areas, commonly identified in the political science literature. The policy areas contains an aggregated amount of groups which could represent different interests. The dimension is further complicated by the changing issue context and other actors which might portray their activity on that area more openly. This could for instance be parties which tie their policy or ideology to these areas directly. The conceptualization table below depicts the conceptualized term. From the theoretical anchoring can now a proper definition of interest group competition be presented:

Interest group competition is competitive interactions between groups due to them occupying the same environment, which limits their ability to act, grow, and influence freely. The environment is limited and defined through the different dimensions characterizing the area and environment of the competition.

Basic level	Interest Group Competition	
Secondary level	Density	
Indicator level	Interest dimension	Policy Area dimension

Table 3.1: Conceptualization table

3.3 Where does density lead us?

The secondary level of the concept highlights the most important theme for the proposed relation between interest group competition and influence that groups perceive to obtain over political parties' policy decisions. When hypothesising the relationship between competition and influence is the role of density in the different dimensions crucial. Density as the proposed measurement for groups occupying the same space, is possible to grade and in turn provide insight on the relationship between competition and influence.

3.3.1 The other side of the coin?

Before hypothesising the outcome of the analysis, is the counter argument: the null-hypothesis discussed. The statistical approach to an hypothesis in Fisherian-statistics is that we know nothing of the phenomenon we are studying, and an alternative hypothesis first comes true when the proof of concept is obtained (Fisher, 1955). The null hypothesis becomes true when this proof is not provided. While arguing that interest group competition is unplowed ground, it is theoretically not fruitful to argue that we know nothing of the phenomenon. An alternative explanation is hence proposed in the interest group collaboration literature. While collaboration is not excluding competition, or the other way around, is it a plausible explanation for why the expected outcome won't occur. As Salisbury et al. (1987) and Browne (1990) finds that collaboration and consolidation is the likely outcome in a competitive link between groups, can the argument of its significance be made.

The collaboration literature has mainly focused on why groups choose to collaborate, and while the concept of interest group competition partly opposes this view is the theory important for the interest group to interest group relation literature, where this thesis also seeks to contribute.

Interest groups join coalitions, form alliances and cooperate in their attempts to influence policy. The literature highlights several factors behind this action. Important factors from the theory are similar to the competition framework presented in this chapter and this provides support for both the thesis' framework and the use of this theoretical founding of the null-hypothesis.

The factors behind why interest groups chooses to work together in line to influence policy makers is studied through cost-benefit analysis. Interest groups are calculating between the costs and benefits of joining a coalition. *Issue context, strength and resources, preferred policy outcome: a change or in support of status quo, niche-structure and institutional design* - are all factors which are important in the collaboration literature. The general found of the literature is both the importance of collaboration when studying influence, and the general success of collaborating groups (Hojnacki, 1997; Mahoney, 2007; Newmark & Nownes, 2019). The modifications to the tale comes with the mentioned factors. Mahoney (2007) finds that groups in narrow niches are found to be more successful, and that niche-structure and issue context is more important than for instance ad hoc issue coalitions. This due to the fact that their given position on an issue through an coalition can hurt their cause. She also points to the groups position on the cause, with those fighting for change having a way harder time opposed to the supporters of status quo.

Niche structure, issue context and resources are also supported by Hojnacki (1997) studying groups valuing of potential allies. In these cases, where groups are focusing narrow niche issues and allies which lack the ability to contribute with "resources" - the costs of forming such an alliance, outweighs the benefits it might accrue. In issue contexts densely populated, opposed by strong interests - which might also be organized, the benefits of an alliance are both obvious, and such a choice can be

viewed as a necessity (Hojnacki, 1997).

3.3.2 The relationship between competition and influence

The relationship between density and competition is assumed to be that the degrees of density correspond with the level of competition. The relationship between interest group competition and influence is hypothesised below. With a main hypothesis looking for the main outcome of the analysis, and dimension specific hypotheses for the dimensions, as competition is expected to differ between these.

Interest group competition is observed through the degree of density in an area, in other words the amount of interest groups occupying an observable dimension. The chosen dimensions in this thesis and its analysis are the: *interest dimension* and *policy area dimension*. The research question seeks to discover how interest group competition affects interest groups influence on political parties policy decisions. Competition is therefore primarily argued to have either a negative or positive effect on the influence the groups are obtaining. The argumentation and discussion so far involves a negative relationship between competition and influence. Actors, groups, operating in an environment which is occupied by a multiple of other groups are facing more competition which results in less influence per group. More competition and conflict leads to less influence per group as some might either take it all, or the spoils are shared with fewer in the more competitive dimensions. The main hypothesis for the analysis is as follows:

Hypothesis: 1 Higher degrees of interest competition tends to reduce the influence each group have over political parties policy decisions. The more competition a group faces, the less influence it perceives.

The main hypothesis describes the assumed relationship between interest group competition and the influence they perceive to obtain over political party policy decision. Rising degrees of competition is assumed to negatively affect the influence each group obtains. The groups target parties to influence, the more groups representing the same interest, or are active on the same area who targets parties, the

more difficult it is to obtain influence. This is indicated through density, describing the competition levels of interaction between the groups in the same environments. The parties, on the other, could face a multitude of groups, in highly dense environments, and would need to choose the group(s) to listen to. Competition in these cases is intuitively understood, and the negative relation with influence is argued.

The main hypothesis covers the research question and main relationship between competition and influence. For the empirical analysis, further specification is in line. It enters the dimensions. The different dimensions of where interest group competition is observed is mainly assumed to have the same correlation as the main hypothesis. The dimensions creates a variation in the complexity of the relation, where the interest-dimension might be seen as a less complex dimension opposed to the policy area-dimension. This comes from the amount of actors and their different positioning on the dimensions.

Competition in the interest dimension presents the most intuitive understanding of the concept. For example can the argument be made one can say that ten different groups are representing an “union/labour” interest. Political parties dealing with decisions on union or labour issues, are then met with ten groups representing that cause and provides similar solutions. As the parties are competing in an electoral and policy contest, are their needs twofold. The group, or combination of groups which can satisfy these needs are most likely seen by the party as their best bet. Hence the groups which qualify for this view from the party, will most likely gain the most influence. As the amount of groups providing the same policy solution increases, the dire need for the solution itself reduces, and the importance of other factors increases. These are deemed to be the cases where groups which fulfil other important criteria gets the most influence. In the interest dimension; the increase in groups providing the same “solution”, as they are representing the same interest, increases the competition - reduces the need for one specific “solution” from the party’s point of view, and results in less influence per group.

Hypothesis 1a: High degrees of interest group competition in the in-

terest dimension will strongly reduce the amount of influence each group is perceiving to have over political party policy decisions per in those interests.

Aggregating interests, to policy areas - where several different interests can be active is competition studied in the policy area-dimension. The policy area dimension increases the amount and variation of groups competing. Competition in the policy area-dimensions is observed through looking at the groups who are active on different policy areas. In the policy area-dimension is the competition assumed to differ from the interest-dimension as the dimension has a wider composition of actors present. Along with this issue context a more relevant factor in this dimension, and is assuming to moderate the relationship between competition and influence. The policy area-dimension takes a more complex form, which affects the predicted strength of the hypothesis. Competition is in this dimensions thought to have a weaker effect on influence, but still negative - in line with the arguments of the main hypothesis. Groups operating in more dense policy areas will still obtain less influence on political parties policy decision, per group. But this relationship is weaker due to the amount of contesting factors and moving parts in the dimension.

Hypothesis 1b: Interest group competition on the policy-area dimension has a weaker effect, compared to the interest dimension, on the influence over political party decisions for each group.

With the interest group competition conceptualized through density and with two dimensions as indicators, will the next chapter operationalize the theoretical concept. The research design will present the design for the analysis, the empirical material which is used and the ways in which the concept will be tested.

Chapter 4

Research design

In this chapter is the research design presented. With the theoretical framework as the guide will this chapter provide the methodological groundwork for the empirical analysis of the research question. The research design produces the necessary components for the analysis in the next chapter.

The chapter will start by presenting how the the empirical material will be applied. The process consists of a complex transformation to create a subset of the raw-data. Following this are the key variables of the analysis presented. The variables are operationalized from the framework in the previous chapter. In the centre of this are the two dimensions were competition is observed:

- **Competition in the interest dimension** is the initial dimension where competition is observed. By looking at the specific interests each group is representing, the dimension tries to cut straight to the bone of the interest group's rationale. The interest is understood as the intuitive way the groups are defining themselves and acts as their baseline of operations. Several groups saying to represent the same interest will occupy the same space, hence contesting to represent that interest to the political parties.
- **Competition in the policy area dimension** is the second dimension where competition is observed, in the thesis. The dimension look at the policy area the groups are active on. An area occupied by several groups has a higher

group density and more competition over obtaining influence on parties. The policy area dimension aggregates the uniqueness of the interest dimension as groups representing different interest could be active on the same area.

After the operationalization of the key variables follows the presentation of the control variables, and the introduction of the modelling comes in the final section on OLS. OLS is the analytical tool used, and its assumptions and limitations are discussed.

4.1 The scope

The Party-Interest Group Relationships in Contemporary Democracies-project (PAIRDEM) has collected the data which will be used in this thesis. Interest group - political party relations is the general theme of the dataset, which is made up of responses from a survey sent out to interest groups in seven different modern western-democracies. The dataset contains data on groups from seven countries in Europe and North America. These are: Denmark, France, Germany, Netherlands, Norway, the UK and the US. The countries are all long-established democracies. The cross-sectional data is hence nested in a multi-level structure where one can expect the data to contain both between and within country variation. The data collection took place between October 2016 and May 2018.¹

The PAIRDEM project provides an impressive set of data, with few (and maybe none) other projects being able to match the width and depth of it. The data provides information on interest group - party relations which fills a void in the literature and enables precise study of interest groups and political party relations.

As the research question seeks to answer whether competition between interest groups affects their influence on party decisions, a good start is both a large N-study, with a varied sample, preferably with cases where both: the activity of interest groups is significant, and it is possible to observe the potential relation between

¹More information on the PAIRDEM-project can be found on <https://pairdem.org/>

interest groups and policy makers. The reasoning for a large N-study is that competition in the interest group influence sphere is still in a discovering phase. Combined with this is the growing relevance and interest for political parties in the literature. A case selection consisting of well-established western-democracies would hence cover these points. PAIRDEM covers these criteria to some extent. With the main issue being the low amount of countries included and a larger N. Both issues can almost always be lifted and are usually linked to resource limitations and project-span.

To get the optimal data for answering my research question I should have collected the data by myself. The formal limitations for my thesis would restrict such a collection to most likely cover a much smaller universe, and the probability of a similar range to what is present in the PAIRDEM-survey is highly unlikely. The goal of discovering knowledge on interest group competition would be harder to obtain. This is one of the main arguments for the application of the PAIRDEM-data.

Studying the same universe, both theoretically and empirically is important for the validity of my thesis. Therefore are similarities between PAIRDEM's theoretical foundation and the framework of this thesis central. The PAIRDEM-project uses an interest group definition in their sampling process, which strongly correlates to the one used in this thesis. This further founds the use of the data, and its application in answering the research question. Their definition covers the three criteria proposed by Beyers et al. (2008). The definition follows:

“Any non-party and non-governmental formal association of individuals or organizations that, on the basis of one or more shared concerns, advocates a particular interest/cause in public and usually attempts to influence public policy in its favour in one way or another.”

The definition is very similar to the one proposed in chapter one by Thomas (1993). The use of existing lists over interest group population in each country² was combined with external sources, lobby registers, national hearings and groups used in recent studies. Local and regional branches of groups, and similar duplicates of

²Norway was an exception here, see <https://pairdem.org/> for more information.

groups/actors were removed due to the survey's focus on national-level groups/actors with a national orientation (Elin H. Allern, Hansen, Røed, & Rødland, 2020).

The thesis transforms the data from a wide- to a long structure, and focuses on three central elements in the survey to create a triadic structure. The result of the transformation is a subset of the PAIRDEM-data which is used in the analysis. This is explained in more detail in subsection 4.1.2 below.

4.1.1 The PAIRDEM sample

The PAIRDEM sample is a random sample with purposive sample to over sample the central actors in each country. The sampling strategy of the survey consisted of creating three different samples for each country. The sampling frame was created to be as similar as possible for each country. From each country there was one random sample, one purposive sample consisting of the ten most important actors within one set of a group categories active within different policy areas, and a company sample consisting of the major companies. The random sample was drawn from the interest group population in each country and the size was calculated with a 95 percent confidence level and 5 percent confidence interval. The purposive sample was drawn to include the key players in 2016. The sample was identified by local experts and categorized by ten broader policy fields from where the groups were drawn. These categories express the policy areas used in the survey which are rooted in old and new cleavages. The categories are comparable cross all countries and represent a high degree of party/policy relevance. The majority of the groups in this sample are the countries' large, long-standing and membership-based groups, with policy advocacy as their *raison d'être*. (Elin H. Allern et al., 2020). The part in the survey focusing on companies is not included in the data material and is therefore not given any more attention. The different drawn samples were combined to a total sample, with a random characteristic consisting of a purposive oversampling of the central groups. The survey-project developed the questionnaire in English which were used in all countries. The response rates for the associations and organisations questionnaire was 29 percent, with 857 out of 2944 respondents. The response rate shows no bias towards group type, but there are significant differences between countries

(Elin H. Allern et al., 2020).

The PAIRDEM data, like all survey-based data, faces challenges regarding validity and reliability. Especially are issues regarding self-evaluation, sampling and questionnaire-development central for surveys. In terms of responding are there several issues often tied to surveys. The survey is also highly detailed and specific, and provides explanations and examples for all questions where this is needed. Self-evaluation might lead to over- or under-reporting, as perception is relative and in the eye of the beholder, in the example of the influence-based survey objects (see subsection 4.1.2) was this dealt with by explanatory comments for the different values on the scale. These measures leads to the expectation that over- or under-reporting might still happen, but at random. In the PAIRDEM-project documentation report are the challenges which the survey faced elaborated on. The discussion on these and measures they took supports the validity and reliability of the data (Elin H. Allern et al., 2020; Bryman, 2016).

4.1.2 Transforming the data: go long, not wide.

The transformation of the data from its raw-format has been one of the key tasks of this thesis. To be able to answer the research question with an quantitative analysis, is the transformation of the raw data on the basis of its contents central. This section will explain how key pillars in the survey-data is identified and how the use of these results in a triadic data structure. A structure which takes a long format, opposed to the wide format of the raw data. These concepts and the process behind the transformation will be elaborated on. The resulting transformation opens the door to the indicators which are used in the mutation of the models' key variables.

Working from the basis of the research question and the themes discussed in the framework am I able to identify three central survey-objects. This process is two sided, as these objects are theoretically well founded in the thesis, while also being central building blocks in the survey itself. (i)Interest group activity in the policy

sphere is the initial interest, as these groups are the ones which are assumed to seek policy influence. (ii) Secondly comes the group-party relationship. An element which can be studied for instance through a lens of “routines versus ad-hoc”. The element is also related to access, an often assumed preface to *influence*. (iii) Lastly, the question of influence. Its importance obviously clear in the thesis and is hence sought after as an indicator.

These three elements corresponds to three survey-objects, three objects which frames the survey and which helps the data structuring of the thesis significantly. The questions draws up; which groups are active and where, who(parties) they usually talk to, and finally how they rate this relation in terms of influence on policy decisions. Below are question Q16, Q17 and Q18 listed.

- **Q16** Within which three of the following policy areas has your organisation been most active the last two years? Tick three boxes below (or fewer if your organisation has only been active in one or two policy fields). If you have been equally active within more than three policy areas, please choose three of them based on what areas you are most familiar with.

- Agriculture/fisheries/forestry
- Economic affairs
- Finance and competition
- Taxation
- Customs and trade
- Energy
- Transport and infrastructure
- Research and technology
- Employment and labour market
- Healthcare and social affairs
- Consumers and food safety
- Regional policy

- Childcare, education and youth
- Immigration
- Justice, police and home affairs
- Environment
- Equal opportunities
- Culture
- Sport
- Information society (including media)
- Public administration
- Defence policy
- Development and humanitarian aid
- Foreign affairs
- None of the above
- do not know

- **Q17** When trying to give input to a public decision-making process on a major policy issue, an organisation might as a 'standard procedure' talk to a particular party/parties and/or their representatives first, independent of whether they are in government or not. Does your organisation usually talk to any of the following parties in particular when trying to give input into the decision-making process on a major issue within the policy areas you are most active? Note: By 'party/parties in particular' we mean (representatives from) specific parties irrespective of whether or not they are in government (/in majority).

- Party X
- Party Y
- No, we do not usually talk to parties
- Don't know

- **Q18** Thinking about when your organization has input into decisions made by parliamentary party groups about economic affairs policies (or other most active policy area) during the current legislative term, how would you rate the influence of your organization on the following parties? Note: If the present legislative term has just begun, please refer to the preceding period. To be considered ‘very influential’, your organization’s input must have had a decisive influence on the positions taken by the parliamentary party.

- Very influential
- Somewhat influential
- Not very influential
- Not at all influential
- Not applicable
- Don’t know

Question 16(Q16) uncovers the policy areas the groups have been most active on, and they are given the opportunity to list up to three different areas. Following this is question 17(Q17) tying the groups activity on the policy areas to the parties they have sought out to give input when active on these areas. This draws a link between the three components in the triadic structure: group - party - policy area. In question 18(Q18) the groups are asked to evaluate their success in this process of input. For the transformation is question 18 the main operator, and is used to create the structure of the subset. This is elaborated on below.

The raw data is built as a wide format, with the amount of columns greatly exceeding the amount of rows. This is due to the amount of questions - corresponding to the total amount of parties, policy areas and countries where groups have responded. While every group did not have to answer every question, for instance did the Norwegian groups only respond to questions regarding Norwegian parties, is the raw-data printing all columns and rows. With the *Q18* survey-object is it possible to gather the columns representing this question for every group, party and policy area and be left with fewer columns where the groups, parties, policy area and

influence now are the key columns. The units of observation in the long format is no longer unique observations for each group. Each group is in the long format observed multiple times, corresponding to the amount of times they have a value(responded to) on the Q18 survey object. To exemplify is group 1 instead of being observed once, on several hundred variables(x amount of possible combinations between policy area, party and influence). Is group 1 now observed x times, corresponding to the x times it has responded a value on influence on a party, on a policy area. It could be one area, maybe ‘Environment’ where the group has replied on Q17 to have given input to x different parties, and obtained between 0 and 3, or “does not know” in these situations. Or it could be that group 1 has been active on both ‘Environment’ and ‘Energy’, and has in these areas given input to x parties and responded a score on the influence-survey object(Q18). The transformation into a subset has hence resulted in a triadic data structure. In this subset, the amount of units have increased from 857 to 9352. The initial subset-transformation had over 12.000 units, which was reduced down to the final number after units with “Not applicable” values on the influence-object were removed. In cases where this happened to a group in total, for instance groups who answered this to every party and on every policy area they reported to be active on, their removal is justified in a lack of influence seeking rationale. As the thesis aim to study the groups who are competing against each other, can groups who does not seek to influence be seen as groups not participating in such a competition. In Table 4.1 is the triadic structure exemplified:

Table 4.1: The triadic data structure exemplified

Group Id	Policy area	Party	Country	Influence
1	Environment	Party 1	Country A	1
1	Environment	Party 2	Country A	2
1	Environment	Party 3	Country A	0
2	Environment	Party 1	Country A	1
2	Environment	Party 2	Country A	3

4.2 Operationalization

Operationalizing the theoretical aspects of the thesis is the process of identifying the operations to which a concept is measured. This is often done by identifying the indicator(s) which is to be used in the analysis, that is to, move from a theoretical variable to an operationalized variable (Bryman, 2016). The goal of this process is to sit with the operationalized variables which has both construct validity and reliability. If the variable lacks construct validity it can either measure something else than the concept of interest, or unsystematic errors. Reduced construct validity could come from loose ties between the operationalized variable and the theoretical or indicators with low precision(either from wrong choices or wrong observations) (Adcock & Collier, 2001). In these cases the inference drawn from the results will rest on shaky grounds and not be coherent when replicated. First will the main concept at hand; interest group competition be given an operational definition, before the individual variables are operationalized.

The theoretical framework of the thesis developed a theoretical definition for interest group competition. Interactions between interest groups are in the framework seen through a competitive lens, based on the groups aim at occupying the same space. A contested space occupied by a higher amount of groups is seen as a highly dense space. Such a space will limit the groups ability to act, grow and influence freely. The space is limited and defined along the two dimensions where competition is studied: *the interest dimension* and *the policy area dimension*. The transition from the theoretical sphere to the empirical is therefore confirmed with the operational definition, which follows:

Interest group competition is the density of interest groups observed occupying the same space. The space is materialized along different competition dimensions, the interest dimension and the policy area dimension.

4.2.1 Measuring the dependent variable: influence

The dependent variable of both analyses is the perceived influence interest groups report to obtain over political parties policy decisions. Influence is mainly measured in three different ways (Klüver, 2011). One can assess attributed influence among interest groups and conduct expert evaluations. Or one can apply process tracing, and look at the preceding process which led up to the event operationalized as influence occurring. The third approach to measuring influence is to estimate the degree of preference attainment. None of these are able to measure whether groups actually made a political party do something it would not have done without the influence from the given group(s).

A self-evaluation of influence, by the groups, has both its strengths and weaknesses. With survey data from different countries, this measure can provide knowledge of general trends and correlations. And a self-evaluation covers a broader scope of the influence concept. Contrary to other methods of measuring influence is self-evaluation not dependent on actual decisions being made and official changes to happen. Only using actual change as the indicator for successful influence, is a strict measure. But it can support a more grounded finding, as the indicator is an objectively observed phenomenon. The weakness with such a strict measure can be exemplified by looking at cases where groups seek to prevent change. In these cases would an outcome not change, but influence could still have happened. Preference attainment is better at catching influence as actual changes/decisions might not happen in the end, but interest group influence might still have been present. While the strengths of the two other methods lay in the realm of strict reliability and/ or the in-depth knowledge which is often generated with process tracing, is the strength of measuring preference attainment the ability to document a larger amount of the groups perceived influence.

The three methods on the issues of causality, could one argue to fall in favour of attributed influence with expert evaluations and process tracing, but they would most likely have a more narrow scope. Being able to uncover general trends and

correlation is more easily obtained with perceived influence. The issues of using perceived influence through self evaluation can be counteracted by using the opposing methods. These methods on the other hand are so demanding that large-n studies are hard to do. And a method of combination, or combining uncovering studies with more focused studies and methods is a more fruitful debate, rather than the pure pro's and con's debate. The literature on interest group-political party influence is, as mentioned earlier, in its initial stages, with a lot of ground to cover (Hojnacki et al., 2012). And as argued is no method better than the other, and so should the scope and research question lead the line in questions of application and use.

The PAIRDEM survey asks the participating groups to rate their influence on the legislative party group of each political party when the group gave input on decisions on the policy areas they work the most with. The questions had a response scale with four values; “not at all influential”, “not very influential”, “somewhat influential” and “very influential”. As the research questions seeks to answer how interest group competition affects the influence interest groups obtain over policy decisions - this question both satisfies as an indicator of influence the groups obtain, and provides degrees of perceived influence, complementing the conceptualization where a *dichotomous win* is highly unlikely. The influence the groups perceives is measured on max three areas. Some groups will perceive to obtain influence on all three areas chosen, some on fewer areas than that, and some even on zero-areas. Groups who responded that the question was not relevant or abstained from answering the question were recorded as missing, and coded out of the data for the analysis. These groups could be a part of the population of groups relevant in the competition discussion, but as the probability of them obtaining influence is zero in the material, is their relevance deemed the same.

The dependent variable is coded as a scale from 0 to 3. With “three” as the highest score. A four point scale provides the opportunity to learn more about the variance in effects between the different competition dimensions and analysis which are performed. As all interval measures could it be argued that the distance between the three categories are not equal. This is moderated through the interpretation

of the results. Table 4.2 presents descriptive statistics for the dependent variable. There are 1337 respondents with the value: “Don’t know”, which are coded as missing(NA.).

Table 4.2: Perceived influence

N	Influence score	Value
3210	0	Not at all influential
2172	1	Not very influential
2080	2	Somewhat influential
553	3	Very influential

4.2.2 Measuring the independent variable: interest group competition

Interest group competition is the main independent variable in the analyses. The variable is in the main analysis constructed in two different ways, along the two dimensions presented earlier. Later in the chapter will also an alternative operationalization be discussed. The two dimensions where competition is observed acts as the guides for the operationalization. In the two main operationalizations of the concept is the observed density on that dimension the main component. The density is calculated by proportionality of groups with corresponding values on the characteristic of the dimensions. The first step is drawing the groups from which the density is to be calculated.

Competition in the interest dimension

The interest dimension aims at discovering competition happening where groups with similar interests occupies the same position. The dimension hence depicts the groups occupation of same interest, and tries to specify these interest as much as possible. An example could be the interest represented by “Union/Labour groups”, while another could be their traditional counterparts: “Business/industry/employers associations”. The basis is the groups which were invited to the survey, which are

categorized into their respective interests. The different interests are shown with higher or lower density scores based on the frequency on that given interest in their country. The calculated density score then indicates the amount of groups from the same interest in the same country, and satisfies the aim at studying interest density.

The interests are operationalized with the group-types defined in the dataset. There is no universal understanding of what constitutes different interests, and therefore is the need for compromise in the operationalization present. The PAIRDEM data coded eleven different categories of group interests, with ten unique and one for *other(residual)*. A small modification to these categories created the final categorisation used in the data, representing the following interests: *Unions/labour, Occupational/professional, Identity groups, Business/industry/employer, Religious/national sports,Public interest, Institutional/policy oriented/think tanks/other*.³ These categories are used to represent the interests in the analysis. In cases where groups seemed to fall between two chairs, did the coders put emphasis on the groups' most fundamental characteristics.

The use of group types as indicator for interest is not unproblematic, but other options are far to time-consuming and is out of the scope of the thesis. Large-N data, cross country, with precise information on groups specific interests - which is also comparable are not obtainable at this moment, and such a study seems very difficult, to say atleast. The share of the different groups represented in the data are very similar to the groups drawn in the sample. This shows no substantial bias in the distribution of the group category responses compared to their distribution in the population (Elin H. Allern et al., 2020). The use of the group categorization from the PAIRDEM-survey is therefore seen as satisfactory for the interest-operationalization. Table 4.3 shows the frequency of groups on each interest, per country and density scores⁴ ⁵. Interest competition is coded with all interests given

³In the appendix is an overview from the PAIRDEM documentation present. Here are examples of the different groups coded into these interests shown.

⁴An aggregated from country level operationalization is included in the robustness tests. See appendix.

⁵The values in Table 4.3 are rounded off

Table 4.3: Interest competition - frequency and density score

Country	Interest	N	Densityscore
Denmark	Union/Labour interest	13	0.032
Denmark	Occupational/professional interest	100	0.244
Denmark	Business/industry/employers interest	124	0.302
Denmark	Religious/nationalsports interest	37	0.090
Denmark	PI interest	65	0.159
Denmark	Institutional/policy oriented/think tanks/other interest	15	0.037
Denmark	Identity interests	56	0.137
France	Union/Labour interest	9	0.026
France	Occupational/professional interest	30	0.087
France	Business/industry/employers interest	124	0.358
France	Religious/nationalsports interest	13	0.038
France	PI interest	131	0.379
France	Institutional/policy oriented/think tanks/other interest	20	0.058
France	Identity interests	19	0.055
Germany	Union/Labour interest	13	0.030
Germany	Occupational/professional interest	88	0.202
Germany	Business/industry/employers interest	149	0.343
Germany	Religious/nationalsports interest	32	0.074
Germany	PI interest	101	0.232
Germany	Institutional/policy oriented/think tanks/other interest	9	0.021
Germany	Identity interests	43	0.099
Netherlands	Union/Labour interest	11	0.024
Netherlands	Occupational/professional interest	84	0.186
Netherlands	Business/industry/employers interest	94	0.208
Netherlands	Religious/nationalsports interest	39	0.086
Netherlands	PI interest	125	0.277
Netherlands	Institutional/policy oriented/think tanks/other interest	32	0.071
Netherlands	Identity interests	66	0.146
Norway	Union/Labour interest	22	0.054
Norway	Occupational/professional interest	91	0.223
Norway	Business/industry/employers interest	76	0.186
Norway	Religious/nationalsports interest	42	0.103
Norway	PI interest	93	0.228
Norway	Institutional/policy oriented/think tanks/other interest	21	0.051
Norway	Identity interests	63	0.154
UK	Union/Labour interest	13	0.029
UK	Occupational/professional interest	112	0.253
UK	Business/industry/employers interest	150	0.339
UK	Religious/nationalsports interest	37	0.084
UK	PI interest	66	0.149
UK	Institutional/policy oriented/think tanks/other interest	23	0.052
UK	Identity interests	41	0.093
US	Union/Labour interest	11	0.024
US	Occupational/professional interest	65	0.144
US	Business/industry/employers interest	190	0.420
US	Religious/nationalsports interest	19	0.042
US	PI interest	102	0.226
US	Institutional/policy oriented/think tanks/other interest	52	0.115
US	Identity interests	13	0.029
	Sum	2944	1.0*

a density score, which sums to 1.0 in each country ⁶. To load the different interests with a unique density the score was calculated by the invited sample of the survey, for each interest in each country. The score then represents the density of groups occupying each density in their country. By using the sample of invited groups as basis, has the measurement an exogenous character in an attempt to mimic a theoretical population. The amount of groups making up the total sample, the groups invited to the survey, sums to 2944. The equation below shows the simple calculation where the number of groups invited for each interest(x) is divided by the total number of groups invited in the sample($\sum x$). This calculation is done for each country.

$$Densityscore = \frac{x}{\sum x}$$

Table 4.3 shows how for instance *Union/Labour interest* has a lower density score than *Occupational/professional interest* in Norway, meaning that the share of groups occupying the former interest is lower, compared to the latter. Groups in interests with higher density scores has higher competition in these interests, compared to groups in interests with lower density scores.

The most obvious issue with the interest dimension operationalization is the interest categorization. This follows in line with the recurring issue as there is not a defined overview of the interest group population. An issue which is affecting the sampling, operationalization and the ability to draw inference. I think a “complete” interest group population is close to being an abstract concept, and for a perfect categorization - one would need to perform a study with solely this aim. The specification of the different interests used for the operationalization of this variable is discussed above, and the consequences following these choices are discussed in the final chapter.

The interest dimension is operationalized with an exogenous structure, drawing on the total amount of groups in the PAIRDEM sample and not only the groups who actually responded for the density score calculation. The groups are hence not only competing against the responding groups but the whole ”sample”.

^{6*} in Table 4.3 sums to 7.0, which is equal to 1.0 for each country

Competition in the policy area dimension

To operationalize competition in the policy area dimension will I apply a policy area categorization. In these areas multiple interests can be active, and the application of the survey object where groups report which policy areas they have been active on becomes relevant. Groups have reported to be active on up to three different areas, depicting the third column in the triadic data-structure. Groups can for instance be observed on policy areas as “energy”, “environment” and “economic affairs”. Or just “military”. Interest group competition on this dimension is hence the total density of groups active on each area.

The amount of groups reporting to be active on the different policy areas provides the density value of that area. The density score is based on the proportion of groups reporting to be active on that area, relative to the total population. To look at interest group activity on the policy areas, survey object Q16 is used. The object asks the groups to choose a maximum of three areas where the group has been most active in the last two years. Some groups are active on just one area, while some groups report to be active on multiple areas. The survey object provides a valid measurement of the groups activity in a the given policy areas, and with the addition of up to three areas per group an increased reliability. For this analysis, which aims at uncovering the effects interest group competition has on influence on political party policy decisions, is the variable satisfactory reliable and valid. Table 4.4 shows the distribution of the policy areas in the dataset and the density score the different policy areas are given⁷. Competition in the policy area dimension is coded with all policy areas given a density score, which sums to 1.0. The density score represents the share of groups occupying the different policy areas. The density score is calculated by dividing the number of observations on the same policy area with the total observations on the policy area variable. Groups have reported to be active on the policy area of “Environment” 619 times(in the triadic structure, which is aggregated). The density score for units which have reported to be active on this area is calculated by dividing 619 by 9352, the total number observations

⁷The values in Table 4.4 are rounded off.

Table 4.4: Policy area competition - frequency and density score

Policy Area	N	Densityscore
agrifish	508	0.054
childedu	594	0.063
consumer	212	0.022
culture	367	0.039
customs	126	0.013
develop	427	0.045
economicaff	654	0.069
employment	709	0.075
energy	331	0.035
environment	619	0.066
equal	293	0.031
external	235	0.025
financecomp	243	0.025
health	1213	0.129
immigrat	305	0.032
info	218	0.023
justice	416	0.044
military	54	0.005
publicadmin	308	0.032
regional	154	0.016
researchtech	496	0.053
sport	151	0.016
tax	386	0.041
transport	333	0.035
	9352	1.0

on the policy-variable (in the triadic structure). “Environment” is then given the density score of 0.066, the result of the calculation. This calculation is repeated for all 24 policy areas in the data, so every unit has a responding density score on the policy areas they have reported to be active on (Cenedese, 2012). The calculation

was also done in the raw format of the data, yielding the same results, proving that the aggregation which takes place in the triadic transformation of the data is not disturbing the observations in the policy area. The policy area competition variable will hence represent a more intense occupation density on the given policy area, if seen with a positive increase - and reversed. The policy area dimension is operationalized with an endogenous structure, as the groups who actually responded makes out the basis of the density score calculation.

The alternative independent variable: Group's position in country

In the survey there is one object which in its original state is similar to an intuitive understanding of interest group to interest group relations. The groups perception of their position in their country, on that given interest. This means that the operationalization has a subjective undertone, as it is based on groups perception. Studies which has tried to look at interest groups in relation to other groups in the sphere of influencing policy makers has used similar variables in their operationalization of either competition, relations, "going it alone or collaborating", etc. (Browne, 1990; Salisbury et al., 1987). The survey object from the PAIRDEM-survey asks the groups to report on their organisation's position in its own country. The object returns a scale reaching from "where the group is the only organising representing that interest", through "one of a few groups...", "There are some groups..." and "There are a lot of groups...". In the data the groups are given a score from 0 to 3, with 0 being where the group sees itself as the only organisation representing that interest, and 3 that there are a lot of groups representing that interest. As all interval measures includes the assumption of equal distance between the values, could this be argued to not be the case here. This approached through the interpretation of the results.

Groups' perception of position in country is an alternating measurement compared to the two competition dimensions, used in the main analysis. A group's perception can be seen as a subjective evaluation. This then opposes the operationalization of the two competition dimensions. In these dimensions, applied through both ex-

ogenous and endogenous traits, represents a more objective evaluation of the main concept: competition. Using group's perception of position in country could also mend some of the issues following the two competition dimensions. With groups themselves identifying the groups which are representing their interest, this could be seen as a more precise evaluation of the actual participants in that interest niche. But this could also lead to observational errors, which could be either random or systematic. I will not further discuss those issues here, but its relevance is grounded as an alternative operationalization.

In Table 4.5 are the descriptive statistics for both the dimensional competition variables, the alternative operationalization (*Group comp.*), and the dependent variable *influence*. The second section of the table shows the correlation matrix for these key variables. The correlation between the dimensional competition variables are both negative and close to being non-significant. An initial error of the models, which will be discussed later. The correlation between *Group comp.* variable, representing groups perceived position in their country is stronger, and therefore a suitable inclusion in the analysis.

Table 4.5: Key variables

(a) Summary statistics of key variables

Influence	Interest comp.	Policy area comp.	Group comp.
Min. :0.000	Min. :0.02069	Min. :0.005774	Min. :0.0000
1st Qu.:0.000	1st Qu.:0.13659	1st Qu.:0.035394	1st Qu.:0.0000
Median :1.000	Median :0.18627	Median :0.053037	Median :1.0000
Mean :0.997	Mean :0.19271	Mean :0.057708	Mean :0.8966
3rd Qu.:2.000	3rd Qu.:0.24390	3rd Qu.:0.069932	3rd Qu.:1.0000
Max. :3.000	Max. :0.42035	Max. :0.129705	Max. :3.0000
NA's :1337	NA's :0	NA's :0	NA's :1065

(b) Correlation matrix

	Influence	Interest comp.	Policy area comp.	Group comp.
Influence	1.0000000	-0.0157570	-0.0429785	0.0894642
Interest comp.	-0.0157570	1.0000000	-0.0662335	-0.1126017
Policy area comp.	-0.0429785	-0.0662335	1.0000000	-0.0070749
Group comp.	0.0894642	-0.1126017	-0.0070749	1.0000000

4.2.3 Control variables

The control variables in the analysis are drawn from the important factors founded in the interest group influence literature: resources and monetary funds, size and structure of organisation, and ideology. Along with this are ties between groups and parties operationalized in different forms, to obtain as high precision as possible. While the factors initially mentioned are founded in a larger part of the literature, are indicators for group-party relationship and contact highlighted in more contemporary founds (E. Allern et al., 2019; Binderkrantz et al., 2016; Klüver, 2018; Otjes & Rasmussen, 2017). The control variables aim to control the effects from the main explanatory variables and reduce the amount of underlying effect in their estimate.

The groups *Annual budget* is used as the variable, to control for their monetary. The variable is coded as a scale, directly corresponding to its survey-object, provided in the appendix. The scale goes from 0 to 5, whereas zero indicates between 0 up to 50,000 EUR. And five indicates more than 5 million EUR.

Financial contributions is another monetary focused control variable, as it controls for the groups financial contribution to parties. The variable is coded as a dichotomy, checking whether the groups have reported to provide indirect and/or direct financial contributions. Indirect financial contributions are exemplified by U.S. donation committees in the PAIRDEM-project.

Groups size and structure is controlled through two categorical variables. *Full-time employee* is coded with three categories: low, medium and high, where low acts as the reference category in the analysis. The variable checks the amount of full-time employees the groups report to have. Low indicates 10 or fewer employees, medium between 11 and 50, and high means 51 or more employees. The other size and structure control is the variable checking for full-time employees the group report to deal with monitoring and commenting on public policy for at least half of their working time, *Full-time policy oriented*. The variable is categorical with three categories: low, medium and high, where low acts as the reference category in the analysis. The categories are coded as following: low indicates 10 or fewer employees. Medium: between 11 and 50. And high: more than 50.

Ideologically oriented is a control variable comprising of multiple “Chapel hill Expert Survey”⁸- ideological positions, which are present in the PAIRDEM Survey. The groups responded on a number of ideological dimensions whether they were supportive or opposing of that ideological issue, from 0 “Fully supportive...” to 10 “Fully opposed...”. Groups could also answer that the question was not applicable or that they did not have a position. The variable used in the analysis is a dichotomy where the groups are given the value 1 if they have responded to take a position on at least one of the ideological dimensions, or 0 if they had responded “not applicable/no position” on every dimension. The variable hence only controls whether groups have an ideological stance, and does not grade that position or places it on different ideological dimensions.

⁸See more on <https://www.chesdata.eu/>

The relationship between interest groups and political parties is done through multiple control variables. *Joint party-group arrangements* controls for whether temporary or permanent committees and conferences on policy and/or strategic issues exist between groups and parties. The variable is coded as a dichotomy where the value 1 is given if any such arrangements exist. *Joint party-group agreements* controls for formal or tacit agreements on regular meetings or representation. The variable is coded as a dichotomy where the value 1 is given if any such agreement exist or is present. *Electoral contributions* controls for different contributions groups has provided towards the parties electoral campaign: this could be labour, materials or premises. If at least one of these conditions are satisfied is the dichotomous variable taking the value of 1. *Electoral endorsements* checks whether groups have officially a party(or candidate) before the election, with a dichotomous variable. The *Invited to events by party/party org.* controls for another organised routine, where the value 1 of the dichotomous variable indicates if either the group has invited the party, or the party has invited the group to an: ordinary, national or special conference/congress.

To control for specific group type characteristics are two variables included: *Active on* and *Group type* dummies. *Active on* controls for the amount of areas the units of the data have responded to be active on. The variable is coded as a categorical variable with three categories; “one”-area, “two”-areas and “three”-areas. The variable is based on survey-object Q17, which I discussed earlier. Controlling for groups who are more active than others, is helpful to administer effects which could come from more active groups being more “successful” / present in those areas.

Two group type dummies are included in the analysis. A dummy checking for group types: Business/industry/employers associations, and a dummy checking for group type: Public interest. The former dummy represents a group type control, commonly used in the interest group influence literature. Groups falling in under the umbrella category of business/industry/employers associations can be seen as representatives for monetary and structurally stronger groups, than the other group types. Public interest is the most heterogeneous group type in the survey sample. The type is identified through a multitude of groups characterized under public

interest. It is the second largest group type which was invited, with 683 groups invited, and second largest group type making up the respondents 190. The public interest group type is further discussed in the robustness tests.

Finally are the models fitted with country fixed effects. The country fixed effects aims at controlling for country specific effects and is further discussed the next section. Table 4.6 shows descriptives for the control variables.

Table 4.6: Descriptive statistics

(a) Continuous control variables

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Annual budget	8,894	2.631	1.857	0.000	1.000	4.000	5.000
Financial contributions	9,305	0.035	0.184	0.000	0.000	0.000	1.000
Joint party-group arrangements	9,352	0.395	0.489	0	0	1	1
Joint party-group agreements	9,352	0.253	0.435	0	0	1	1
Invited to events by party/party org.	9,352	0.605	0.489	0	0	1	1
Electoral contributions	9,205	0.036	0.186	0.000	0.000	0.000	1.000
Electoral endorsements	9,239	0.026	0.159	0.000	0.000	0.000	1.000
Ideological stance	9,128	0.621	0.485	0.000	0.000	1.000	1.000

(b) Categorical control variables

Full-time employee	Full-time policy oriented	Areas most active on
Low :3118	Low :4430	One : 822
Medium:2291	Medium: 991	Two :1685
High :1959	High : 186	Three:6845
NA's :1984	NA's :3745	

4.3 Ordinary least square with fixed effects

The method of analysis used is “Ordinary least square(OLS) regression”. I approach the analysis by looking at the three different operationalizations of competition separately, with their own regression analysis. Competition in the different dimensions is the key explanatory variable.

While the data is a nested structure and the possibility of a multilevel-analysis is theoretically present, are there enough statistical arguments to steer clear of this method. As groups are hierarchically nested on a country-level, could multi-level analysis be used. The issue is that there are not enough secondary level observations, meaning that there would need to be more countries in the data. While nested data could provide biased estimate due to different variance on the two levels, is this approached through the country fixed effects.

Variables which variates between respondents, but which are constant for each respondent over time or space, as in this analysis where the latter is true: country, is controlled for in a fixed effects analysis(FE.) (Christophersen, 2013). The inclusion of fixed effects enables the model to control for the characteristics which are constant and specific for each unit (Christophersen, 2013). The methodological reasoning behind the application of fixed effects is that unit specific hallmarks which are not identified and measured, are affecting both the dependent and independent variables. FE. controls for this, and prevents estimates to be affected by omitted variable bias (Worrall, 2010). The alternative to FE. is random effects analysis(RE.) which is provided in the robustness tests, presented in the appendix. The response rate by country, in the survey, shows that the smaller countries, like Norway and Denmark, have a higher response rate compared to the larger countries like the US and Germany. This documents the constant differences between the units in the data. And as country fixed effects are recommended in the same report, are measures to counteract such effects in the models obvious.

In order to perform the empirical analysis is the statistical work done in the software

R (R Core Team, 2017)⁹¹⁰. OLS regression is a method of linear regression, where the aim is to model the relationship between the dependent and one or more explanatory variables (Hanck, Arnold, Gerber, & Schmelzer, 2019). With the models fitted with country fixed effects are there some modifications to the main assumptions of the regression (Stock & Watson, 2015). The assumptions of ordinary least squares (OLS)

Table 4.7: Assumptions of OLS with fixed effects

Assumptions of Ordinary Least Squares (OLS) regression with fixed effects

1. The error term has a conditional mean zero, given all T and P values of X for that entity. I.e. there is no omitted variable bias.
 2. The variables are independently and identically distributed across entities.
 3. Large outliers are unlikely.
 4. There is no perfect multicollinearity.
 5. Residuals are homoscedastic.
 6. Residuals are normally distributed.
-

regression with fixed effects are listed in Table 4.7, and lays the basis for both the modelling and robustness tests. The assumptions with high relevance for the models are discussed along with some general notions on OLS regression in the following section.

4.3.1 Diagnostics and robustness

The main approach to diagnosing the method of OLS regression is to follow the assumptions of the method. Testing these assumptions and looking for discrepancy, which then in turn can be adjusted for, discarded or accepted by non-statistical justifications.

⁹The R Scripts for how the analysis and data transformation is done can be delivered upon request.

¹⁰The PAIRDEM dataset is not yet published, and is not for me hand out. If it is needed for replication or such, can Elin H. Allern at the Department of Political Science of the University of Oslo be contacted.

Omitted variable bias, translating from an error term which does not have a conditional mean zero, can be seen through: (i) unexpected direction on variable-coefficients, (ii) non-significant coefficients and (iii) large changes in R^2 with the addition of new variables (Christophersen, 2013). But these indicators are not only determined by omitted variable bias. The recommendations in the literature is to choose the explanatory variables and the other independent variables from theory, to best avoid omitted variable bias (Bryman, 2016; Christophersen, 2013; Stock & Watson, 2015). To control for omitted variable bias at country level, will the country fixed effects contribute. The variables used in the models of the analysis are all founded in the theoretical framework and through the operationalization earlier, and the assumptions is seen as satisfactory.

The form of the relationship between the dependent and explanatory variable is put under doubt through the correlation matrix ???. A linear relation between them is often seen through a significant correlation estimate, based on Pearson's R , which is close to not being the case here (Christophersen, 2013; Hanck et al., 2019). As this assumption is far from perfect in the models of the analysis, will this effect the significance of the variable-coefficients. In the robustness tests are other regressions and modulations included to tackle the issue of the partly non-linear form of the relationship. Along with the form of the relationship can the distribution of the residuals be discussed. The models are partly satisfying the assumption, with some disturbances at the tail-values and head-values. These disturbances are not significant enough to break the condition, but nor are they edging the models closer to a BLUE-estimate (Christophersen, 2013; Hanck et al., 2019). As the model is cross-sectional, and not panel-data where the same observations are observed over a timespan is autocorrelation an assumption which is not needed to consider.

Heteroskedastic robust standard errors

It is assumed that the residuals should be equally distributed along a straight line, indicating a homoscedastic distribution. If the residuals are not equally distributed along this line the distribution is called heteroskedastic. While this does not effect

the estimate, it is affecting the standard errors - and robust standard errors should be used (Christophersen, 2013).

To correct for this, with robust standard errors, will I apply heteroskedastic robust standard errors(HC) for the models where this is needed. These come in a couple of difference calculations, calculated from a covariance matrix estimator (see Long and Ervin, 2000 for more info on the calculations). I will in the models use the HC0 covariance matrix estimator to calculate the standard errors, which gave the best results, compared to the other calculations. The differences between the different *HC* calculations were minimal, and so was the difference between original standard errors and the robust. This indicates a very low degree of heteroskedasticity.

Clustered standard errors are applied to the second model in the analysis. In the appendix are the tests for robust standard errors provided. In model 2, analysing policy area competition did clustered standard errors, clustered on the “party” variable prove to be the best option. Clustered standard errors are often used in cases of covariance interdependent of different clusters were also tested. Such robust standard errors work better in larger samples and in cases of autocorrelation. Clusters on group type, policy, party and country were tested, and party was satisfactory in the policy area model(model 2).

Multicollinearity

Collinearity appears when two independent variables correlate. Perfect collinearity appears when this correlation equals to 1. In a case of perfect multicollinearity are one independent variable an actual combination of other independent variables (Christophersen, 2013). While a high R^2 indicates perfect multicollinearity, is it not a bulletproof indicator. All models in the analysis have relatively low R^2 , and further tests are done with VIF tests. None of the variables, in any of the models had disturbing values in the VIF tests. And the issue of multicollinearity can hence be put to rest.

Independent variables

Independent variables needs to be tested for their distribution and outliers or influential observations. An initial issue and flaw is the skewness of multiple variables (Christophersen, 2013). For the explanatory variables are interest competition the least skewed variable with a score of 0.04, group’s position in country next with a score of 0.76 and policy area the most skewed with a score of 1.10.

Several transformations have been attempted in order to improve upon the issue of skewness. Especially log. transformations and Box-Cox transformations is used in the literature to solve issues of skewness (Box & Cox, 1964). None of these provided significant improvement to the skewness of the variables included in the model and the models themselves. This means that a theoretical founding of the included variables was done, by me. Skewed variables could cause issues for the homoskedastic and normalized distributed residuals. These are already dealt with, above and hence is the statistical worry of this issue put to rest. In Figure 4.1 are histograms of the key variables shown. Every model was tested for outliers and specially influential

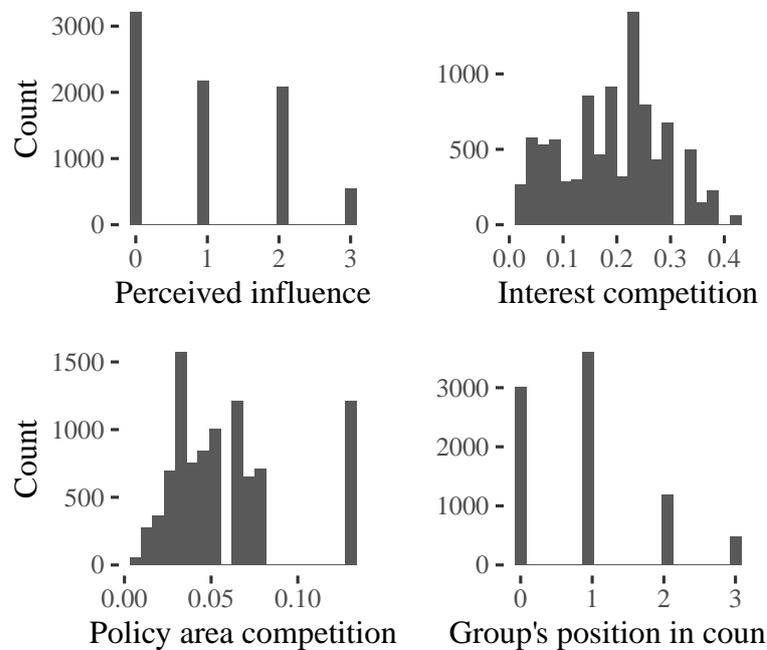


Figure 4.1: Histogram of the key variables

observations. The tests to identify these were: “hat-values”, “Bonferroni p-value”,

“Studentized residuals” and “Cook’s distance”. The observations identified throughout these tests for the models were removed and the models were analysed again. The removal of the identified observations in the tests did not have a significant effect on the estimates of the models.

Robustness test

To both provide measures for shaky assumptions, and test the stability of the models, will I provide several robustness tests in the appendix. The test will provide different modulations, different regression methods and specifications. As interest group competition is tested through a new operationalization and one set of data, could one argue that the robustness and stability of the models is problematic. To provide insight to this argumentation, uncover flaws, and elaborate on already discovered issues are the robustness tests in the appendix.

In the appendix are the following tests provided: (i) Robust standard errors modifications for all models. (ii) Reduced sample models (iii) Interactions. The results of these tests are briefly discussed in the next chapter.

Chapter 5

Analysis and results

This chapter presents the empirical analysis of interest group competition, with the goal of answering the research question:

Is competition between interest groups determining the extent of influence interest groups are obtaining over political parties policy decisions?

The chapter starts with a outline of the analysis, which is followed by the discussion on the results of the models. The general results make up the contents of the final section, providing general remarks and conclusions.

From the theoretical framework has the competition aspect of the research question been further elaborated on, while the groups' goal of influencing political parties has been a recurring theme since its introduction in the literature review. The theoretical framework describes interest group competition as the contest which occurs as multiple groups are occupying the same environment. The environments are defined through two dimensions where density, and in turn competition, can be observed. *Competition in the interest dimension*(i) and *competition in the policy area dimension*(ii) are the two dimensions, where interest groups are occupying the same interests in the former, and the same policy area in the latter.

In the previous chapter was the empirical material discussed; the triadic structure of the subset of the PAIRDEM-survey data. The chapter also provided operationalized

definitions of the theoretical concepts and presented the key variables of the analysis. *Influence*, measured through the groups' perceived influence on policy decisions taken by political parties, as the dependent variable. *Interest competition* and *Policy area competition* as the two main explanatory variables. The two competition variables are operationalized by calculating density scores for the individual interests and policy areas, which would indicate the degree of competition. In addition to, and as a robustness test is a *Group's position in country* applied as a third competition operationalization. This last variable diverts from the theoretical definition of the thesis' framework, but is more closely linked to the few other "competition studies" in the interest group-literature.

The main hypothesis for the analysis is:

Hypothesis: 1 Higher degrees of interest competition tends to reduce the influence each group have over political parties policy decisions. The more competition a group faces, the less influence it perceives.

Which in general terms hypothesises that the competition-variables should have negative effects, with increasing values leading to reduced scores on the influence variable.

5.1 The analysis

The analysis consists of three models, with two main models, all done by OLS-regression with country-fixed effects. The dependent variable, influence, is identical in all three models, while the explanatory variables: *interest competition(mod.1)*, *policy area competition(mod.2)* and *group's position in country(mod.3)* differs.

The OLS analysis is explained in-depth in the previous chapter, and is only briefly summarized here. The OLS regression calculates the ordinary least square estimate, and tries to calculate the optimal regression-line between the observations. In all three models are country-fixed effects applied, and for visual reasons suppressed in

Table 5.1: OLS analysis of interest group competition

	Perceived influence	
	Model 1	Model 2
	(1)	(2)
Interest competition	-0.618** (0.206)	
Policy area competition		-0.804* (0.356)
Annual budget	0.086*** (0.013)	0.085*** (0.020)
Financial contributions	-0.151 (0.104)	-0.182 (0.202)
Full-time employee: Medium	0.040 (0.041)	0.045 (0.060)
Full-time employee: High	0.069 (0.052)	0.078 (0.089)
Full-time policy oriented: Medium	0.124** (0.039)	0.133 (0.070)
Full-time policy oriented: High	0.363*** (0.103)	0.332* (0.164)
Joint party-group arrangements	-0.102** (0.031)	-0.098** (0.031)
Joint party-group agreements	0.282*** (0.034)	0.283*** (0.032)
Invited to events by party/party org.	0.202*** (0.035)	0.217*** (0.054)
Electoral contributions	-0.093 (0.110)	-0.065 (0.103)
Electoral endorsements	-0.246 (0.132)	-0.212 (0.185)
Ideological position	-0.072* (0.033)	-0.077 (0.056)
Active on: Two areas	-0.006 (0.075)	-0.007 (0.082)
Active on: Three areas	0.174** (0.067)	0.170** (0.064)
Group type: Business/industry/employeers associations	0.081 (0.046)	-0.015 (0.053)
Group type: Public interest	0.316*** (0.042)	0.244*** (0.066)
Constant	0.539*** (0.084)	0.504*** (0.101)
Observations	4,443	4,443
R ²	0.118	0.117
Adjusted R ²	0.114	0.113
Residual Std. Error (df = 4419)	0.913	0.914
F Statistic (df = 23; 4419)	25.795***	25.497***

Note:

*0.05; **0.01; ***0.001

Reference category for Full-time employee: Low

Reference category for Full-time policy oriented: Low

Reference category for Active on: One area

Country FE. removed

Model 1: Estimated with heteroskedastic robust standard errors.

Model 2: Estimated with party-clustered robust standard errors.

the regression table Table 5.1. The country-fixed effects controls for country-specific variations in the data, hoping to moderate such effects on the estimates. Model 1 is estimate with heteroskedastic robust standard errors, while model 2 is estimated with clustered robust standard errors. This is discussed in the previous chapter and tested in the appendix.

5.1.1 Model 1: Interest competition

Model 1 is analysing the effects of competition in the interest dimension on the groups' perceived influence. The relation between the dependent- and explanatory variable, is negative and significant shown with the estimate -0.618 . This indicates that an increase in competition in the interest dimension leads to an decrease in the influence the groups perceives to obtain on the parties policy decisions. As competition is operationalized through density is it clear that the more groups occupying the same interest, the less influence are they to obtain per group.

The estimate of *Interest competition* supports the hypothesis(*hypothesis 1a*) proposed for this dimension:

High degree of interest group competition on the interest-dimension has a negative effect on influence over political party decisions per group in those interests.

The effect of interest competition on influence is negative. The estimate is significant, but it is worth noting the strength of it. The estimate is close to -0.6 and the levels competition would have need over two units increase for a scale reduction in the groups perceived influence.

An important discussion of model one is the low correlation between the interest competition variable and influence. The results of the model, where the effect of competition is significant and in relative strength, needs further exploration. There are factors in the model which drives the result and these needs to be discovered. In Table 5.2 are three modulations of the interest competition dimension shown. From

Table 5.2: Interest competition modulations

	Perceived influence			
	Base	Base+Resources	Base+Resources+Relations	Full(model 1)
	(1)	(2)	(3)	(4)
Interest competition	0.034 (0.114)	-0.050 (0.148)	0.019 (0.150)	-0.618** (0.206)
Annual budget		0.085*** (0.013)	0.080*** (0.013)	0.086*** (0.013)
Financial contributions		-0.230*** (0.064)	-0.220* (0.100)	-0.151 (0.104)
Full-time employee: Medium		0.097* (0.040)	0.075 (0.041)	0.040 (0.041)
Full-time employee: High		0.159** (0.049)	0.143** (0.050)	0.069 (0.052)
Full-time policy oriented: Medium		0.192*** (0.038)	0.126** (0.039)	0.124** (0.039)
Full-time policy oriented: High		0.275** (0.097)	0.273** (0.099)	0.363*** (0.103)
Joint party-group arrangements			-0.070* (0.031)	-0.102** (0.031)
Joint party-group agreements			0.239*** (0.033)	0.282*** (0.034)
Invited to events by party/party org.			0.242*** (0.035)	0.202*** (0.035)
Electoral contributions			0.054 (0.103)	-0.093 (0.110)
Electoral endorsements			-0.366** (0.125)	-0.246 (0.132)
Ideological position				-0.072* (0.033)
Active on: Two areas				-0.006 (0.075)
Active on: Three areas				0.174** (0.067)
Group type: Business/industry/employers associations				0.081 (0.046)
Group type: Public interest				0.316*** (0.042)
Constant	0.910*** (0.031)	0.794*** (0.053)	0.572*** (0.056)	0.539*** (0.084)
Observations	8,015	4,621	4,533	4,443
R ²	0.024	0.067	0.097	0.118
Adjusted R ²	0.023	0.065	0.093	0.114
Residual Std. Error	0.956 (df = 8007)	0.936 (df = 4607)	0.924 (df = 4514)	0.913 (df = 4419)
F Statistic	27.964*** (df = 7; 8007)	25.569*** (df = 13; 4607)	26.824*** (df = 18; 4514)	25.795*** (df = 23; 4419)

Note:

*0.05; **0.01; ***0.001

Country FE. removed

Estimated with heteroskedastic robust standard errors.

a base model, with only *interest competition* and *influence*. To added resources and resources plus group-party relations in model. The final model is the model printed in Table 5.1. The four models shows both a change in direction, strength and significance of the estimate describing the relationship between interest competition and influence. The significance of the *most active* and *group type* control variables, in the model are also made clear. This leads me to think that as most active is detrimental in explaining groups ability to influence. Groups who report to be most active in three areas have a significant positive effect on influence, when controlling for the other variables. I can also assume that groups which are active in three areas are more likely to be familiar in the sphere of influence. And they could maybe be more known to the parties who chooses the groups they want input from. Along the driving force of “most active” are group type seemingly important in the modelling of interest competition. Especially “public interest” is a strong, positive significant estimate. Public interest is a very heterogeneous group type, consisting of multiple different groups types. These are included in the appendix. The interest is also highly represented in the sample data, which is also true for “business/industry/employers assoc.”-groups. This means that these two groups have a higher density score. There might be an argument where a certain threshold on the density score is driving the interest competition estimate. Indicating that the lowest density scores does not have the same effects as the higher. The lack of strong correlation between interest competition and influence could support this argument. Robustness tests with reduced samples are provided in the appendix, and while the final model is proved to have underlying drivers is it a satisfactory presentation of the phenomenon.

Interest competition is operationalized both through exogenous indicators and country specifications. The exogenous demeanour of the measurement tells us that it will greatly vary with the sampling used as the foundation. The specification of interests would also come into play here, and they are in combination important aspects when looking at the reliability of the results, and when trying to replicate them.

Analysing competition in the interest dimension resulted in support for *hypothesis*

1a, with a negative estimate. The relationship between interest competition and influence is at first glance negative, and an increase in competition results in lower influence. A closer look behind the model 1 shows that the competition-estimate is unstable, leading me to think that there are uncertainty in the results. But the model provides some proof of concept. Operationalizing interests is a complicated matter, as discussed in the previous chapter. There is no complete overview of the interest population, and to include every imaginable interest in an empirical material would be a massive task. In *model 1* Table 5.1, are two group type categories included as control variables, due to their theoretical importance and empirical presence. The interests are specified through seven categories, and this categorization is of course an important driver behind the measurement. A more specific interest categorization (more narrow interest niches, for instance) and / or an increase in observations could provide other results, or confirm the results provided here. This is further discussed in the next chapter.

5.1.2 Model 2: Policy Area competition

In model 2 is policy area competition analysed. The model tests hypothesis 1b:

Interest group competition on the policy-area dimension has a weaker effect, compared to the interest dimension, on the influence over political party decisions for each group.

The estimate of -0.804 is negative and shows how an increase in policy area competition, indicated by growth in the policy area's density score, would decrease the groups perceived influence. The estimate of the variable is significant on a 0.05 significance level, and therefore is the substantial interpretation is statistically grounded.

The estimated effect of policy area competition on perceived influence is -0.804 , a relatively strong, negative effect. This means that a one-unit increase in policy area competition would reduce the perceived influence score by -0.804 . The hypothesis then, did not predict the correct strength specification. Competition in the policy area dimension shows a stronger effect than in the interest dimension. The main

hypothesis is still supported, but the proposed argumentation seems to be flawed. First and foremost would the approach be to reverse the proposed arguments. With a more complex dimension was it argued that group to group competition would drown in the sea of factors, but maybe it is the other way around. In the policy area dimension could competition be even more fierce. As groups perceive their environments to not only be surrounded by other groups, but maybe party-competition and issue salience increases the competitiveness. The only way to get their message across is to out compete groups with similar interests, opposing interests, and show to already competing parties in highly salient cases that they propose the best solution. Which in the end shows that the complexity of the dimensions increases the level of competition between the groups. As individual actors will they identify the complex environment they operate in, and see competition to be even more fierce. Those few groups who manages this, might end up with a larger piece of the influence-cake, deeming less to the not so fortunate groups.

As interest competition modulations provided fruitful insights, and the correlation between policy area competition and influence is equally weak, is further exploring done for this model as well. The importance of the “most active” and “group type” control variables are once again telling. But in the policy area competition they are moderating the effect, and not changing the direction nor affecting the significance. It is obvious that a measurement which focuses directly on the policy areas where groups report to influence is affected by an “activity” control. While the modulations in Table 5.2 showed a lack of stability for the model, could it be argued that the base model in the policy area competition appears to be more stable. Important control variables, are affecting the estimates, but not completely changing them.

Table 5.3: Policy area competition modulations

	Perceived influence			
	Base	Base+Resources	Base+Resources+Relations	Full(model 2)
	(1)	(2)	(3)	(4)
Policy area competition	-1.230*	-1.561*	-1.385*	-0.804*
	(0.353)	(0.405)	(0.390)	(0.356)
Annual budget		0.084***	0.084***	0.085***
		(0.024)	(0.021)	(0.020)
Financial contributions		-0.234	-0.284	-0.182
		(0.159)	(0.212)	(0.202)
Full-time employee: Medium		0.099	0.083	0.045
		(0.069)	(0.063)	(0.060)
Full-time employee: High		0.166	0.146	0.078
		(0.118)	(0.098)	(0.089)
Full-time policy oriented: Medium		0.196	0.113	0.133
		(0.071)	(0.076)	(0.070)
Full-time policy oriented: High		0.276*	0.317*	0.332*
		(0.150)	(0.151)	(0.164)
Joint party-group arrangements			-0.061**	-0.098**
			(0.029)	(0.031)
Joint party-group agreements			0.245***	0.283***
			(0.033)	(0.032)
Invited to events by party/party org.			0.246***	0.217***
			(0.057)	(0.054)
Electoral contributions			-0.004	-0.065
			(0.104)	(0.103)
Electoral endorsements			-0.260	-0.212
			(0.189)	(0.185)
Ideological position			-0.008	-0.077
			(0.072)	(0.056)
Active on: Two areas				-0.007
				(0.082)
Active on: Three areas				0.170**
				(0.064)
Group type: Business/industry/employers associations				-0.015
				(0.053)
Group type: Public interest				0.244***
				(0.066)
Constant	0.989***	0.875***	0.637***	0.504***
	(0.049)	(0.080)	(0.091)	(0.101)
Observations	8,015	4,621	4,443	4,443
R ²	0.026	0.069	0.102	0.117
Adjusted R ²	0.025	0.067	0.098	0.113
Residual Std. Error	0.956 (df = 8007)	0.935 (df = 4607)	0.922 (df = 4423)	0.914 (df = 4419)
F Statistic	29.941*** (df = 7; 8007)	26.439*** (df = 13; 4607)	26.374*** (df = 19; 4423)	25.497*** (df = 23; 4419)

Note:

*0.05; **0.01; ***0.001

Country FE. removed

Estimated with party-clustered robust standard errors.

A negative relationship

Both models in Table 5.1 supports the main hypothesis of the thesis, with estimates indicating a negative relationship between increased competition and perceived influence. The main reasoning for the negative estimates are interpreted to be the increased difficulty groups experiences in being able to influence parties in an interest or policy area populated by groups supplying similar solutions, or in the latter dimension: groups supplying similar and opposing solutions. The last section of this chapter further discusses these results.

5.1.3 Model 3: The alternative operationalization

The alternative operationalization of interest group competition is done by using a variable where the groups responded on their position in their country. From this one can deduct that if they responded to be surrounded by a plethora of groups representing an equal/or similar interest the argument of competition between these group is present. At least in the spirit of this thesis. *Model 3* tests this notion. The estimate of *Group's position in country* is a close to zero, but still a positive coefficient of 0.044, significant at 0.05 significance level. Groups reporting that “one or more” other groups are representing the same interest have an increased score on perceived influence, compared to groups who see themselves as the only group representing the given interest in their country. In the alternative operationalization is the correlation between competition and influence positive, which goes against the main hypothesis. It is possible that if the variable was given more indicators, for instance if the groups were asked on their relation with these same-interest groups, the variable could provide even more to our understanding. The operationalization of such a variable is, as mentioned earlier, previously used in competition- or interest group relationship studies. And while it has a weak effect in this analysis, is it absolutely proving to be valuable, at least as an indicator for interest group relationship studies and in the field of interest group influence.

Table 5.4: Group's position in country

	Perceived influence
	Model 3
Group's position in country	0.044* (0.019)
Annual budget	0.063*** (0.014)
Financial contributions	-0.140 (0.106)
Full-time employee: Medium	0.095* (0.043)
Full-time employee: High	0.115* (0.053)
Full-time policy oriented: Medium	0.072 (0.042)
Full-time policy oriented: High	0.203 (0.120)
Joint party-group arrangements	-0.104** (0.033)
Joint party-group agreements	0.265*** (0.036)
Invited to events by party/party org.	0.290*** (0.037)
Electoral contributions	0.007 (0.113)
Electoral endorsements	-0.329* (0.147)
Ideological position	-0.025 (0.036)
Active on: Two areas	-0.051 (0.082)
Active on: Three areas	0.068 (0.074)
Group type: Business/industry/employeers associations	0.016 (0.038)
Group type: Public interest	0.231*** (0.039)
Constant	0.463*** (0.083)
Observations	3,938
R ²	0.106
Adjusted R ²	0.101
Residual Std. Error	0.918 (df = 3914)
F Statistic	20.240*** (df = 23; 3914)

Note:

*0.05; **0.01; ***0.001

Country FE. removed

Estimated with heteroskedastic robust standard errors.

5.2 Summarizing the results

Interest group competition as a concept, and factor for understanding interest group influence on political parties policy decisions, had same-direction estimates in both dimensions of competition. The two models in the main analysis, using: the interest competition dimension and the policy area competition dimension as independent variables both proved an negative relationship between increased competition and influence. The relationship was challenged by the alternative operationalization, *group's position in country*. This shows what interest group competition, while negative in the two dimensions, as a whole is not a one-sided issue. With the main operationalizations did the analysis prove the concept, but as *model 1* and *model 2* lacked stability and showed the importance of control variables is it not possible to conclusively accept interest group competition as a general concept. While the concept neither contains mutually exclusive indicators, nor lacks significance, would further specification be an improvement to consider. A recurring theme in the process of the analysis has been how increased specification, through for instance narrow interest operationalizations, country-specific density measures, etc., has provided value to the analysis.

The main hypothesis of the thesis proposes that increased interest group competition reduces the groups perceived influence. This is shown to be true for both dimensions. In both dimensions are the importance of resources, *annual budget* and *financial donations* as well as the structural size of the groups. Maybe more importantly did the variables controlling for the amount of areas the group were active on. While the variables controlling for resources, size and ideology all have a place in the literature, did the models also include relevant control variables looking at the relationship between groups and parties.

Table 5.1 shows that competition between interest groups are determining the degree of influence groups are perceiving to obtain. Groups competing against a large degree of groups with similar interests, relative to the total amount of groups representing this interests, are perceiving to obtain less influence. The same can be

said of groups who are competing on policy areas where a large degree of groups are active, relative to the total amount of groups being active on this area. Interest group competition tells a part of the story of *interest group influence*. To clarify this part, and help improve on further use of this concept and operationalization, the weakness of the measurements needs discussion.

Competition in the interest dimension is the distinction between “group type” and “interest” of high importance. The framework of the thesis focuses on the uniqueness of interest, while the operationalization has to make some “sacrifices” in order to obtain a measurable indicator. By operationalizing “interest” with the group type indicator from the PAIRDEM data, did the measurement obtain a partially specification and statistical validity. This does not mean that it is the perfect solution to the issue. In line with the literature’s incomplete picture of the interest group population, is identifying the unique interests and their representatives equally difficult. This means that beneath the interest competition model(model 1 in Table 5.1) is there an issue of the “unique interest” understanding. The presented model has a partially specified interest indicator as the foundation, but further improvement and modifications is here possible. With that in mind is the interest competition model in Table 5.1 able to provide interesting knowledge on how competition in the interest dimension is affecting the groups perceived influence.

The complexities of multiple moving parts in the policy area competition dimension, is one of the main difficulties with the empirical study of this dimension. The dimension is filled with multiple groups, which are seen as both familiar and unfamiliar on the given policy area. Along with the issue of salience, and party competition on that area. While both models in the main analysis have a low R^2 , is competition in the policy area below 0.1 in the adjusted measurement. The argument of omitted variable bias can be made for both models, but maybe even stronger in model 2. The inclusion of such variables could uncover more explanatory power in the model, and maybe capture more of the depicted complexity of the dimension. The added information of ideology, which is only loosely touched upon in this thesis could also come into play. The issue at hand in several policy areas lack straightforward solu-

tions, and could even be coloured by deeply rooted cleavage or high media actuality. Such examples, describing an area could be constant for some areas, or shifting in others, but they still present a factor which further complicates the dimension where competition is observed.

In model 2 are “solutions” presented to some of these factors. But it is still a depiction of multiple moving parts. The interpretation and inference from the model notices this, and this should also be the motivation for further studies. *Hypothesis 1b* tries to hypothesize the complexity of the dimension, where a weaker effect was proposed. This was not supported, and questions over the argumentation and model specification can be raised. With an increased amount of “moving parts” will most models fail in one way or another. What the model on policy area competition has proven is how an increase in density score leads to less interest group influence. It is attempted to control for both group-party relationships and ideology to control for the moving parts in the dimension. But this is a complex affair. A complexity which should only encourage further studies.

Robustness tests

The key finding in the tests were related to the reduced sample, looking at the sample without “business/industry/employers associations groups”. When doing so is the estimate of policy area competition positive and non-significant. A drastic change from the whole sample model. This indicates an importance in this group type in this modulation, and justifies the use of a control variable for this group type. While interactions are popular options in political science are they often in need of deeper theoretical and statistical justification. In this thesis has such not been provided, and interaction models has been placed in the appendix. The findings does provide a further interest in the findings of interest group competition as more is left to be discovered.

The following chapter contains the conclusive remarks of the thesis with a summary of the process, its contribution to the literature and possibilities of further studies.

Chapter 6

Conclusion

Interest groups are trying to influence decision makers to affect the policy outcome. A complicated affair, which needs untangling. I have in this thesis looked at how interest groups compete against each other, in their attempt to influence political parties policy decisions. By zooming away from policy outcome, and zooming in on political parties have I tried to contribute both to the influence and political party group fields of the literature. I have provided a framework to study interest group competition, which can be applied in future studies as an explanatory factor in the literature. I have also approached political parties, and groups' attempt to influence their policy decisions as an alternative to the commonly used policy outcome in the influence literature. The result of my analysis is that interest group competition has a negative effect on each group's perceived influence on political parties policy decisions. The analysis provides proof of concept for my conceptualization of interest group competition, and significant findings opens the door for future use. As all new contributions, is this neither flawless and issues on omitted variable bias and stability needs further attention.

Building on rational choice theory, exchange-theory and population-theory have I constructed a framework, where the concept of interest group competition plays the leading role. Interest group competition focuses on the groups as individual actors, which operates in certain environments. In these environments are groups interacting with each other and the natural state is competition. These environments

are categorized into two dimensions: *interest* and *policy area*. *Competition in the interest dimension* focuses on the uniqueness of interests which groups represents. Categorizing an environment for each interest in the study. *Competition in the policy area dimension* looks at policy areas for determining the environments where group operate, and in each area there can be same-interest groups and other interest groups active. For all environments are density the indicator for competition, where higher degrees of density indicates higher levels of competition.

Interest group - party influence is a complex matter, and I used groups perceived influence on political parties policy decisions as the indicator for influence. This means that it is the groups self-evaluation of influence which acts as the dependent variable. A measure with both strengths and weaknesses, but chosen here for its inclusion of a multitude of groups which are policy seeking and aim to influence political parties. Self-evaluation is not the same as observing change due to groups' influencing parties, but any such measure would need data from two points in time and "policy change" is arguably a complex affair which could come from more than interest group influence.

Creating a subset of groups which aim to influence political parties was needed, as I assume that interest groups compete against each other to obtain influence. To participate in "this" competition, the groups needed to be seeking influence. I used data from the PAIRDEM-project and transformed a subset with a triadic data structure. The two independent variables are differently operationalized, where interest is computed through an exogenous manner, is policy area computed endogenous. By using values outside of the survey-sample is the interest measure thought to be a more valid representation of the interest universe. Policy area is based on the actual data sample, and comes from the groups responded activity on policy areas. An exogenous structure could be difficult to achieve for this dimension. For both dimensions are density scores calculated for each interest and each policy area - making up the explanatory variables.

6.1 Interest group competition reduces influence

The empirical analysis tests the hypotheses of the thesis, to answer the research question. The analysis is done through OLS regression, on a subset of the PAIRDEM-survey data with 9352 units. Table 6.1 summarizes the findings of the analysis, with the hypotheses. The analysis consists of a main analysis (Table 5.1) with *model 1* and *model 2*, and a secondary analysis (Table 5.4) testing the alternative operationalization of competition in *model 3*. The models in the main analysis supports

Table 6.1: Summary of findings

Model	Hypothesis	Results
Model 1 and Model 2	<i>Hypothesis 1:</i> Higher degrees of interest competition tends to reduce the influence each group have over political parties policy decisions. The more competition a group faces, the less influence it perceives.	Supported
Model 1	<i>Hypothesis 1a:</i> High degrees of interest group competition in the interest dimension will strongly reduce the amount of influence each group is perceiving to have over political party policy decisions per in those interests.	Supported
Model 2	<i>Hypothesis 1b:</i> Interest group competition on the policy-area dimension has a weaker effect, compared to the interest dimension, on the influence over political party decisions for each group.	Not supported

the main hypotheses (*H.1*). An increase in competition, indicated by higher density scores, reduces the amount of influence groups perceive to obtain. The relationship between competition and influence is negative in both models, with a slightly lower estimate in the interest dimension.

This relationship also means that the interest dimension specific hypothesis (*H.1a*) is supported. Competition in each interest is thought to significantly reduce the influence each group perceive to obtain due to amount of groups providing the “same” solution to the parties. But the model is vulnerable to case-specific changes or changes in specificity. This indicates a lower certainty, than optimal, to firmly found the relationship between competition in the interest dimension and perceived

influence. Specifying interest is also a difficult matter. This is affected by the operationalization, theorizing, the data material, and an overarching uncertainty surrounding the lack of a “known” interest group universe. The operationalization used in the model was based on two group type categorizations from the PAIRDEM-survey¹, which combined interests to obtain a satisfactory *n*. I am sure different interest groups would object to their placement in the interest-categories. Larger changes here, with different specifications on the interest-categorization would absolutely affect the estimates, and most likely the relationship described in the analysis. Competition in the interest dimension is affecting perceived influence in a negative manner in my model, if this is true for all specifications of interest and cases observed is unfortunately not certain.

The policy area dimension specific hypothesis is not supported in model 2. The hypothesis predicted a weak effect, partly disappearing in the dimension with multiple “moving parts”. The model did not support this. Competition in the policy area dimension had a strong negative effect on the groups perceived influence, compared to competition in the interest dimension. The policy area dimension has different “moving parts” with differing actors and issue context being central. The models in the main analysis has included several control variables to control for these effects, but this is a difficult process - and it could be argued that each of these elements could justify a thesis on its own. A moderation to the conclusion from the model is hence necessary.

Model 3 is placed in a sub-analysis, representing an alternative operationalization of interest group competition. The variable rates how interest groups’ perceive their position in their country, in relation to other groups. High scores are given when the groups identify that there are a lot of other groups representing the same interest. The relationship opposes the two previous models, and shows a positive relationship. While the estimate is weak, is it a significant relationship opposing the findings of the models in the main analysis.

¹See Appendix F for the PAIRDEM interest coding scheme.

A key difference between the two operationalizations is the “subjective versus objective” structure. A groups perception of its position is determined by its awareness, its unique definition of the interest it represents, and how other groups fits with this definition. It is a subjective structured measurement. By calculating density scores, am I providing an objective structured measure with the two competition dimensions. This argument is not meant to highlight how the one is better than the other, it is rather done to shine a light upon the vast difference between the measurements. The alternative operationalization used in model 3 is the recurring indicator used in the few other studies looking at interest group competition, which in itself provides reliability to it. Determining whether the competition dimensions or the alternative operationalization is superior over the other, is a multi-faceted question. And as most questions in the methodological literature, are the answers found somewhere in the middle.

Interest group competition is happening in the environment where interest groups operate. The groups as individual actors have a perception of their environment and the political context there, and this in turn is assumed to affect how they attempt to influence political parties. With the state of nature in these environments being that their individuality means conflict with groups in the same environment. By looking at it from the parties perspective, this makes sense as they identify different areas they seek information, input, resources, etc. from. I assume that they in one way or another “pick and choose” actors(groups) from these areas. The groups have different alternatives in their approach to the natural state of the environment, where collaboration is a popular strategy in the literature.

A recurrent effect in the relationship between interest group competition and influence cannot be ruled out. It is possible that groups which have already obtained influence, are more likely to obtain influence again. And will they have to compete the second time, or have they already “won”(for the time being)? These are questions which will be difficult to answer, and even study in large-n studies. And a recurrent element might be difficult to discover in more in-depth cases, as the larger picture still is unclear. These questions are raised here, as I believe the “void” still

needs plenty of discovery before in-depth studies on complex recurring mechanisms can be performed.

Along with the empirical findings, has the analysis provided theoretical support for a “new” concept. By building a theoretical framework to conceptualize a concept which was previously not studied, should the empirical analysis also aim to ground this work. I believe it has done so. Deducting from different theoretical schools to create a multi-dimensional concept of interest group competition, new ways to studying group to group interactions have appeared. While the results might vary between data and operationalizations have I provided proof of concept. The concept and my findings can be used in future studies for the interest group literature, both as an theoretical framework and analytical measurement. The objective measure of density to indicate levels of competition can further be applied in the study of interest group interactions and interest group influence. I would have hoped for stronger explanatory power from my models, and further specified my operationalizations as I believe this would strengthen the analytical use of the concept.

The thesis concludes that interest group competition to some degree determines the influence groups perceive to obtain. It shows how some groups are less effective in their influence pursuit as they represent interests, or are active in policy areas which are densely populated. More competition is described as more dense areas, and it is this degree of density which describes how competition affects the groups ability to influence. It does not conclude that competition explains the complete picture, and is aware of omitted variable bias which most likely troubles the models. But the analysis has shun light upon a previously undiscovered field. The words of Crosby, Stills, Nash and Young come to mind: “To sing the blues you’ve got to live the dues - And carry on” (Stills, 1970). I hope future studies find it useful.

6.2 Limitations and further research

Influence is studied through groups own perception. This was made possible through the new data provided by the PAIRDEM-project, making it possible to study interest group - party influence across several countries. This data differs from the majority of previous studies on interest group influence were individual policy proposals and issues have been the cases. Such studies does only pick up changes, but in cases where the goal was either to leave something of the agenda or keep the status quo would groups' influence be harder to discover. This is one of the main strengths with analysing the large-n PAIRDEM-survey data. This also limits the inference I can draw from the influence variable, as it does not control for actual change. Or one could say that a group could report to obtain influence even if someone else did the influencing, but with the same goal, then why not borrow some credit?

In all models presented in the analysis is the R^2 low, this could come from other explanatory factors which could be included. In the realm of interest group - party influence could the relationship between these two be further specified and included. For the interest dimension could group type specification be relevant, as it focuses on the uniqueness of groups interest. While in the policy dimension could especially issue salience be a relevant factor. The basis for including variables in the models should always come from theory, and with the framework of the thesis being a new route ready for modulation and improvements.

Competition in the policy area dimension is just one indicator for a highly complex sphere, which has previously been mentioned. But the focus here is that groups' activity in given policy areas could vary, and most likely does. The groups can focus their attention on one area, if they see this fitting, or spread their attention over multiple areas. Groups were asked which (three) areas they were most active on, and this is a topic which could effect future results. Activity, policy areas defined and groups' position are three limitations which would need to be addressed in future research. The dimensions in general are also mentioned to be limited by their specifications, which I partly limited to the availability with the data.

Ideological ties and ideological proximity to actors are factors which are not approached. E. Allern et al. (2019) shows how ideological proximity matters when groups choose to establish relationships with parties. Ideology could maybe be regarded as a own dimensions, where same-ideological groups compete against each other. Ideology is important in party systems, and this could be a focus for further research. Either including more ideological factors into the dimensions, looking at how maybe ideological similarities effect the interactions between groups, etc. The relevance of the factor in interest group influence literature is discussed in chapter two, and more knowledge to the field of interest group interactions and influence could be drawn from the ideological factors.

The data used in the thesis, cross-sectional with established western-democracies as cases, is it possible to generalize to similar cases in Europe and North-America. In cases where both the party system differs, or in the future if both the current party system and interest group system changes will my findings face difficulties. Another important point is the status of interest group competition. I have found a corner of the sub-category of the interest group influence literature where I could contribute. This means that, while this thesis has discussed the concept and influence as a proven relationship, is this only a small piece in a large puzzle. My contributions can at best be conclusive for the interest group relations literature, and then mostly as a supportive found. I will not say that “I went looking for answers so you would not have to”, as I hope the results of this thesis opens the door to further studies on interest group relations in the influence sphere.

As more interest groups occupy the same space, the influence they obtain seems to be reduced. This says something about the representation of interests in the political sphere. Organizing interests in areas where such organizations already exists might not support the cause, rather it diminishes it. Does this mean that larger and more powerful interests is the way to go? Or would the results say that narrow niches and even more diversification is the way to go? Large organizations would reduce the need for competition, but it could also hurt small causes and specific niches

as big picture-solutions and compromise would be the name of the game. On the other hand could an immensely diverse interest field be too overwhelming for the parties. One might think that parties would rather work with well structured, large membership and resource strong organizations rather than small niches. If further research on interest group competition supports the notion of a negative relationship with increased density, then the rational strategy would be to form large coalitions. Such coalitions would reduce the impact of smaller niche interests as they operate under an umbrella organization. And if so would be the case, will small interests survive? How interests are represented in the political sphere is possible to further uncover with the framework and methods used in this thesis.

Bibliography

- Adcock, R., & Collier, D. (2001). Measurement validity: A shared standard for qualitative and quantitative research. *American political science review*, *95*(3), 529–546.
- Allern, E. [E.], Klüver, H., Marshall, D., Otjes, S., Rasmussen, A., & Witko, C. (2019). Choosing an agent: Why do interest groups establish. *Unpublished*.
- Allern, E. [E.H.], & Bale, T. [T.]. (2017). *Left-of-centre parties and trade unions in the twenty-first century*. Oxford University Press. Retrieved from <https://books.google.no/books?id=qogLDgAAQBAJ>
- Allern, E. H. [Elin H.]. (2010). *Political parties and interest groups in norway*. ECPR press.
- Allern, E. H. [Elin H.], Hansen, V., Røed, M., & Rødland, L. (2020). *The PAIRDEM project documentation report for interest group surveys*.
- Allern, E. H. [Elin H.], & Bale, T. [Tim]. (2012). Political parties and interest groups: Disentangling complex relationships. *Party Politics*, *18*(1), 7–25. doi:10.1177/1354068811422639
- Baumgartner, F. R., & Leech, B. L. (1998). *Basic interests: The importance of groups in politics and in political science*. Princeton University Press.
- Beyers, J., De Bruycker, I., & Baller, I. (2015). The alignment of parties and interest groups in EU legislative politics. a tale of two different worlds? *Journal of European Public Policy*, *22*(4), 534–551. doi:10.1080/13501763.2015.1008551
- Beyers, J., Eising, R., & Maloney, W. (2008). Researching interest group politics in europe and elsewhere: Much we study, little we know? *West European Politics*, *31*(6), 1103–1128.

- Beyers, J., & Hanegraaff, M. (2017). Balancing friends and foes: Explaining advocacy styles at global diplomatic conferences. *The Review of International Organizations*, 12(3), 461–484. doi:10.1007/s11558-016-9262-z
- Binderkrantz, A. S., Christiansen, P. M., & Pedersen, H. H. (2015). Interest group access to the bureaucracy, parliament, and the media: Interest group access. *Governance*, 28(1), 95–112. doi:10.1111/gove.12089
- Binderkrantz, A. S., & Krøyer, S. (2012). Customizing strategy: Policy goals and interest group strategies. *Interest Groups & Advocacy*, 1(1), 115. doi:10.1057/iga.2012.6
- Binderkrantz, A. S., Pedersen, H. H., & Beyers, J. (2016). What is access? a discussion of the definition and measurement of interest group access. *European Political Science*, 16(3). doi:10.1057/eps.2016.17
- Binderkrantz, A. S., & Rasmussen, A. (2015). Comparing the domestic and the EU lobbying context: Perceived agenda-setting influence in the multi-level system of the european union. *Journal of European Public Policy*, 22(4), 552–569. doi:10.1080/13501763.2015.1008553
- Box, G. E., & Cox, D. R. (1964). An analysis of transformations. *Journal of the Royal Statistical Society: Series B (Methodological)*, 26(2), 211–243.
- Browne, W. P. (1990). Organized interests and their issue niches: A search for pluralism in a policy domain. *The Journal of Politics*, 52(2), 477–509. doi:10.2307/2131903
- Bryman, A. (2016). *Social research methods*. Oxford university press.
- Cenedese, C. (2012, January 17). Density current. Encyclopædia Britannica, inc. Retrieved from <https://www.britannica.com/science/density-current>
- Christophersen, K.-A. (2013). *Introduksjon til statistisk analyse: Regresjonsbaserte metoder og anvendelse*. Gyldendal akademisk.
- Crombez, C. (2002). Information, lobbying and the legislative process in the european union. *European Union Politics*, 3(1), 7–32. doi:10.1177/1465116502003001002
- Dahl, R. A. (1963). *Who governs?: Democracy and power in the american city*. Place of publication not identified: Yale University Press.

- Dür, A., Bernhagen, P., & Marshall, D. (2015). Interest group success in the european union: When (and why) does business lose? *Comparative Political Studies*, *48*(8), 951–983. doi:10.1177/0010414014565890
- Dür, A., & Mateo, G. (2013). Gaining access or going public? interest group strategies in five european countries: Gaining access or going public? *European Journal of Political Research*, *52*(5), 660–686. doi:10.1111/1475-6765.12012
- Dür, A., & Mateo, G. (2016). *Insiders versus outsiders: Interest group politics in multilevel europe*. Oxford University Press.
- Farrell, D. M., & Schmitt-Beck, R. (2008). *Non-party actors in electoral politics: The role of interest groups and independent citizens in contemporary election campaigns*. Nomos Verlagsgesellschaft Mbh & Company.
- Fiorina, M. (2001, January 1). Rational choice in politics. In N. J. Smelser & P. B. Baltes (Eds.), *International encyclopedia of the social & behavioral sciences* (pp. 12760–12763). doi:10.1016/B0-08-043076-7/01221-3
- Fisher, R. (1955). Statistical methods and scientific induction. *Journal of the Royal Statistical Society: Series B (Methodological)*, *17*(1), 69–78.
- Friedman, M. (1983). Busting the school monopoly. *Edchoice. org*.
- Giger, N., & Klüver, H. (2016). Voting against your constituents? how lobbying affects representation. *American Journal of Political Science*, *60*(1), 190–205.
- Goertz, G. (2012). *Social science concepts: A user's guide*. Princeton University Press. Retrieved from <https://books.google.no/books?id=KbHtAQAAQBAJ>
- Gray, V. (1996). *The population ecology of interest representation : Lobbying communities in the american states* (). Ann Arbor: University of Michigan Press.
- Hanck, C., Arnold, M., Gerber, A., & Schmelzer, M. (2019). Introduction to econometrics with r. *Essen: University of Duisburg-Essen.[Google Scholar]*.
- Heidar, K., & Koole, R. (2003). *Parliamentary party groups in european democracies: Political parties behind closed doors*. Taylor & Francis. Retrieved from <https://books.google.no/books?id=rgGDAgAAQBAJ>
- Hojnacki, M. (1997). Interest groups' decisions to join alliances or work alone. *American Journal of Political Science*, *41*(1), 61. doi:10.2307/2111709

- Hojnacki, M., & Kimball, D. C. (1999). The who and how of organizations' lobbying strategies in committee. *The Journal of Politics*, *61*(4), 999–1024. doi:10.2307/2647551
- Hojnacki, M., Kimball, D. C., Baumgartner, F. R., Berry, J. M., & Leech, B. L. (2012). Studying organizational advocacy and influence: Reexamining interest group research. *Annual Review of Political Science*, *15*, 379–399.
- Holyoke, T. T., & Cummins, J. (2019). Interest group and political party influence on growth in state spending and debt. *American Politics Research*, *23*.
- Klüver, H. (2011). The contextual nature of lobbying: Explaining lobbying success in the european union. *European Union Politics*, *12*(4), 483–506. doi:10.1177/1465116511413163
- Klüver, H. (2013). *Lobbying in the european union : Interest groups, lobbying coalitions, and policy change*. Oxford: Oxford University Press 2013.
- Klüver, H. (2018). Setting the party agenda: Interest groups, voters and issue attention. *British Journal of Political Science*, 1–22. doi:10.1017/S0007123418000078
- Laver, M. (1989). Party competition and party system change: The interaction of coalition bargaining and electoral competition. *Journal of Theoretical Politics*, *1*(3), 301–324. doi:10.1177/0951692889001003003
- Long, J. S., & Ervin, L. H. (2000). Using heteroscedasticity consistent standard errors in the linear regression model. *The American Statistician*, *54*(3), 217–224.
- Lowery, D., & Gray, V. (1995). The population ecology of gucci gulch, or the natural regulation of interest group numbers in the american states. *American Journal of Political Science*, *39*(1), 1. doi:10.2307/2111755
- Lowery, D., & Gray, V. (2004). A neopluralist perspective on research on organized interests. *POLITICAL RESEARCH QUARTERLY*, *13*.
- Mahoney, C. (2007). Lobbying success in the united states and the european union. *Journal of Public Policy*, *27*(1), 35–56. doi:10.1017/S0143814X07000608
- Mair, P. (2015). Party systems. In *International encyclopedia of the social & behavioral sciences* (pp. 567–569). doi:10.1016/B978-0-08-097086-8.93090-3
- Marshall, D. (2015). Explaining interest group interactions with party group members in the european parliament: Dominant party groups and coalition for-

- mation. *JCMS: Journal of Common Market Studies*, 53(2), 311–329. doi:10.1111/jcms.12163
- McConnell, G. (1970). *Private power & american democracy*. Vintage.
- Michalowitz, I. (2007). What determines influence? assessing conditions for decision-making influence of interest groups in the EU1. *Journal of European Public Policy*, 14(1), 132–151. doi:10.1080/13501760601072719
- Newmark, A. J., & Nownes, A. J. (2019). Lobbying conflict, competition, and working in coalitions. *Social Science Quarterly*, 100(4), 1284–1296. doi:10.1111/ssqu.12644
- Olson, M. (1965). *The logic of collective action : Public goods and the theory of groups*. Cambridge, Mass: Harvard University Press.
- Otjes, S., & Rasmussen, A. (2017). The collaboration between interest groups and political parties in multi-party democracies: Party system dynamics and the effect of power and ideology. *Party Politics*, 23(2), 96–109. doi:10.1177/1354068814568046
- R Core Team. (2017). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. Vienna, Austria. Retrieved from <https://www.R-project.org/>
- Salisbury, R. H., Heinz, J. P., Laumann, E. O., & Nelson, R. L. (1987). Who works with whom? interest group alliances and opposition. *American Political Science Review*, 81(4), 1217–1234. doi:10.2307/1962586
- Stills, S. (1970). Carry on. Retrieved from [https://en.wikipedia.org/wiki/Carry_On_\(Crosby,_Stills,_Nash_%26_Young_song\)](https://en.wikipedia.org/wiki/Carry_On_(Crosby,_Stills,_Nash_%26_Young_song))
- Stock, J. H., & Watson, M. W. (2015). *Introduction to econometrics*.
- Thomas, C. (1993). *First world interest groups: A comparative perspective*. Greenwood Press. Retrieved from <https://books.google.no/books?id=LXeGAAAAMAAJ>
- Truman, D. B. (1971). *The governmental process*. Alfred A. Knopf.
- Worrall, J. L. (2010). A user-friendly introduction to panel data modeling. *Journal of Criminal Justice Education*, 21(2), 182–196. Publisher: Taylor & Francis.

Appendix A

Appendix A: Robustness test 1: Robust standard errors

In this appendix are the models of the analysis tested with different robust standard errors. The tables are printed with (1) non-robust standard errors. (2) Heteroskedastic “HC0” robust standard errors. (3) Heteroskedastic “HC3” robust standard errors. (4) Clustered robust standard errors, clustered on party. Other clusters were tested; “country” and “group type”, but party were the significant best cluster amongst these.

Table A.1: SE analysis: Interest competition

	Perceived influence			
	Standard SE	HC0 SE	HC3 SE	Cluster:Party SE
	(1)	(2)	(3)	(4)
Interest competition	-0.618** (0.209)	-0.618** (0.206)	-0.618** (0.208)	-0.618* (0.310)
Annual budget	0.086*** (0.014)	0.086*** (0.013)	0.086*** (0.013)	0.086*** (0.020)
Financial contributions	-0.151 (0.100)	-0.151 (0.104)	-0.151 (0.105)	-0.151 (0.199)
Full-time employee: Medium	0.040 (0.041)	0.040 (0.041)	0.040 (0.041)	0.040 (0.060)
Full-time employee: High	0.069 (0.053)	0.069 (0.052)	0.069 (0.052)	0.069 (0.091)
Full-time policy oriented: Medium	0.124** (0.042)	0.124** (0.039)	0.124** (0.039)	0.124 (0.066)
Full-time policy oriented: High	0.363*** (0.100)	0.363*** (0.103)	0.363*** (0.104)	0.363* (0.156)
Joint party-group arrangements	-0.102** (0.032)	-0.102** (0.031)	-0.102** (0.032)	-0.102*** (0.030)
Joint party-group agreements	0.282*** (0.033)	0.282*** (0.034)	0.282*** (0.034)	0.282*** (0.033)
Invited to events by party/party org.	0.202*** (0.037)	0.202*** (0.035)	0.202*** (0.035)	0.202*** (0.054)
Electoral contributions	-0.093 (0.102)	-0.093 (0.110)	-0.093 (0.112)	-0.093 (0.102)
Electoral endorsements	-0.246 (0.127)	-0.246 (0.132)	-0.246 (0.134)	-0.246 (0.182)
Ideological position	-0.072* (0.034)	-0.072* (0.033)	-0.072* (0.033)	-0.072 (0.056)
Active on: Two areas	-0.006 (0.076)	-0.006 (0.075)	-0.006 (0.076)	-0.006 (0.083)
Active on: Three areas	0.174* (0.068)	0.174** (0.067)	0.174** (0.067)	0.174** (0.065)
Group type: Business/industry/employeers associations	0.081 (0.047)	0.081 (0.046)	0.081 (0.046)	0.081 (0.056)
Group type: Public interest	0.316*** (0.042)	0.316*** (0.042)	0.316*** (0.042)	0.316*** (0.071)
Constant	0.539*** (0.085)	0.539*** (0.084)	0.539*** (0.085)	0.539*** (0.105)
Observations	4,443	4,443	4,443	4,443
Adjusted R ²	0.114	0.114	0.114	0.114

Note:

*0.05; **0.01; ***0.001

Country FE. removed

Table A.2: SE analysis: Policy area competition

	Perceived influence			
	Standard SE	HC0 SE	HC3 SE	Cluster:Party SE
	(1)	(2)	(3)	(4)
Policy area competition	-0.804 (0.488)	-0.804 (0.478)	-0.804 (0.481)	-0.804* (0.356)
Annual budget	0.085*** (0.014)	0.085*** (0.013)	0.085*** (0.013)	0.085*** (0.020)
Financial contributions	-0.182 (0.100)	-0.182 (0.103)	-0.182 (0.105)	-0.182 (0.202)
Full-time employee: Medium	0.045 (0.041)	0.045 (0.041)	0.045 (0.041)	0.045 (0.060)
Full-time employee: High	0.078 (0.053)	0.078 (0.052)	0.078 (0.052)	0.078 (0.089)
Full-time policy oriented: Medium	0.133** (0.042)	0.133*** (0.039)	0.133*** (0.039)	0.133 (0.070)
Full-time policy oriented: High	0.332*** (0.100)	0.332** (0.105)	0.332** (0.106)	0.332* (0.164)
Joint party-group arrangements	-0.098** (0.032)	-0.098** (0.032)	-0.098** (0.032)	-0.098** (0.031)
Joint party-group agreements	0.283*** (0.033)	0.283*** (0.034)	0.283*** (0.034)	0.283*** (0.032)
Invited to events by party/party org.	0.217*** (0.037)	0.217*** (0.034)	0.217*** (0.035)	0.217*** (0.054)
Electoral contributions	-0.065 (0.102)	-0.065 (0.109)	-0.065 (0.111)	-0.065 (0.103)
Electoral endorsements	-0.212 (0.126)	-0.212 (0.132)	-0.212 (0.134)	-0.212 (0.185)
Ideological position	-0.077* (0.034)	-0.077* (0.033)	-0.077* (0.033)	-0.077 (0.056)
Active on: Two areas	-0.007 (0.077)	-0.007 (0.076)	-0.007 (0.076)	-0.007 (0.082)
Active on: Three areas	0.170* (0.069)	0.170* (0.067)	0.170* (0.068)	0.170** (0.064)
Group type: Business/industry/employers associations	-0.015 (0.037)	-0.015 (0.036)	-0.015 (0.036)	-0.015 (0.053)
Group type: Public interest	0.244*** (0.037)	0.244*** (0.036)	0.244*** (0.036)	0.244*** (0.066)
Constant	0.504*** (0.088)	0.504*** (0.086)	0.504*** (0.087)	0.504*** (0.101)
Observations	4,443	4,443	4,443	4,443
Adjusted R ²	0.113	0.113	0.113	0.113

Note:

*0.05; **0.01; ***0.001

Country FE. removed

Table A.3: SE analysis: Group's position in country competition

	Perceived influence			
	Standard SE	HC0 SE	HC3 SE	Cluster:Party SE
	(1)	(2)	(3)	(4)
Policy area competition	0.044 (0.019)	0.044* (0.019)	0.044 (0.019)	0.044 (0.026)
Annual budget	0.063*** (0.015)	0.063*** (0.014)	0.063*** (0.014)	0.063*** (0.020)
Financial contributions	-0.140 (0.102)	-0.140 (0.106)	-0.140 (0.108)	-0.140 (0.212)
Full-time employee: Medium	0.095 (0.043)	0.095* (0.043)	0.095 (0.043)	0.095 (0.055)
Full-time employee: High	0.115 (0.056)	0.115* (0.053)	0.115 (0.053)	0.115 (0.082)
Full-time policy oriented: Medium	0.072** (0.045)	0.072 (0.042)	0.072*** (0.042)	0.072 (0.072)
Full-time policy oriented: High	0.203*** (0.109)	0.203 (0.120)	0.203** (0.122)	0.203* (0.188)
Joint party-group arrangements	-0.104** (0.034)	-0.104** (0.033)	-0.104** (0.034)	-0.104** (0.034)
Joint party-group agreements	0.265*** (0.035)	0.265*** (0.036)	0.265*** (0.036)	0.265*** (0.030)
Invited to events by party/party org.	0.290*** (0.039)	0.290*** (0.037)	0.290*** (0.037)	0.290*** (0.065)
Electoral contributions	0.007 (0.104)	0.007 (0.113)	0.007 (0.114)	0.007 (0.106)
Electoral endorsements	-0.329 (0.135)	-0.329* (0.147)	-0.329 (0.149)	-0.329 (0.215)
Ideological position	-0.025* (0.037)	-0.025 (0.036)	-0.025* (0.037)	-0.025 (0.063)
Active on: Two areas	-0.051 (0.083)	-0.051 (0.082)	-0.051 (0.082)	-0.051 (0.094)
Active on: Three areas	0.068* (0.075)	0.068 (0.074)	0.068* (0.074)	0.068** (0.078)
Group type: Business/industry/employeers associations	0.016 (0.039)	0.016 (0.038)	0.016 (0.038)	0.016 (0.057)
Group type: Public interest	0.231*** (0.039)	0.231*** (0.039)	0.231*** (0.040)	0.231*** (0.074)
Constant	0.463*** (0.087)	0.463*** (0.083)	0.463*** (0.083)	0.463*** (0.107)
Observations	3,938	3,938	3,938	3,938
Adjusted R ²	0.101	0.101	0.101	0.101

Note:

*0.05; **0.01; ***0.001

Country FE. removed

Appendix B

Appendix B: Robustness test 2a: Reduced sample: USA

In this appendix are the main models of the analysis ran with a reduced sample. The observations from USA are removed from the sample. In the raw-data is USA the lowest responding country with only 27 observations out of the total 857. In the triadic data structure are there 120 units from USA out of the total 9352 units.

Table B.1: Interest competition with reduced and whole sample

	Perceived influence	
	Reduced sample	Whole sample
	(1)	(2)
Interest competition	-0.634** (0.212)	-0.618** (0.206)
Annual budget	0.089*** (0.014)	0.086*** (0.013)
Financial contributions	-0.189 (0.112)	-0.151 (0.104)
Full-time employee: Medium	0.032 (0.041)	0.040 (0.041)
Full-time employee: High	0.054 (0.053)	0.069 (0.052)
Full-time policy oriented: Medium	0.130** (0.040)	0.124** (0.039)
Full-time policy oriented: High	0.409*** (0.105)	0.363*** (0.103)
Joint party-group arrangements	-0.112*** (0.032)	-0.102** (0.031)
Joint party-group agreements	0.291*** (0.034)	0.282*** (0.034)
Invited to events by party/party org.	0.205*** (0.035)	0.202*** (0.035)
Electoral contributions	-0.085 (0.112)	-0.093 (0.110)
Electoral endorsements	-0.198 (0.150)	-0.246 (0.132)
Ideological position	-0.085* (0.033)	-0.072* (0.033)
Active on: Two areas	-0.004 (0.076)	-0.006 (0.075)
Active on: Three areas	0.177** (0.068)	0.174** (0.067)
Group type: Business/industry/employers associations	0.079 (0.046)	0.081 (0.046)
Group type: Public interest	0.335*** (0.043)	0.316*** (0.042)
Constant	0.542*** (0.086)	0.539*** (0.084)
Observations	4,352	4,443
R ²	0.118	0.118
Adjusted R ²	0.113	0.114
Residual Std. Error	0.915 (df = 4329)	0.913 (df = 4419)
F Statistic	26.300*** (df = 22; 4329)	25.795*** (df = 23; 4419)

Note:

*0.05; **0.01; ***0.001

Reference category for Full-time employee: Low

Reference category for Full-time policy oriented: Low

Reference category for Active on: One area

Country FE. removed

Estimated with heteroskedastic robust standard errors.

Table B.2: Policy area competition with reduced and whole sample

	Perceived influence	
	Reduced sample	Whole sample
	(1)	(2)
Policy area competition	-0.867* (0.360)	-0.804* (0.356)
Annual budget	0.087*** (0.020)	0.085*** (0.020)
Financial contributions	-0.221 (0.219)	-0.182 (0.202)
Full-time employee: Medium	0.037 (0.061)	0.045 (0.060)
Full-time employee: High	0.065 (0.089)	0.078 (0.089)
Full-time policy oriented: Medium	0.142* (0.070)	0.133 (0.070)
Full-time policy oriented: High	0.380* (0.167)	0.332* (0.164)
Joint party-group arrangements	-0.109*** (0.031)	-0.098** (0.031)
Joint party-group agreements	0.293*** (0.032)	0.283*** (0.032)
Invited to events by party/party org.	0.221*** (0.055)	0.217*** (0.054)
Electoral contributions	-0.056 (0.105)	-0.065 (0.103)
Electoral endorsements	-0.155 (0.220)	-0.212 (0.185)
Ideological position	-0.091 (0.055)	-0.077 (0.056)
Active on: Two areas	-0.005 (0.082)	-0.007 (0.082)
Active on: Three areas	0.173** (0.064)	0.170** (0.064)
Group type: Business/industry/employeers associations	-0.016 (0.054)	-0.015 (0.053)
Group type: Public interest	0.262*** (0.066)	0.244*** (0.066)
Constant	0.506*** (0.102)	0.504*** (0.101)
Observations	4,352	4,443
R ²	0.117	0.117
Adjusted R ²	0.112	0.113
Residual Std. Error	0.916 (df = 4329)	0.914 (df = 4419)
F Statistic	26.006*** (df = 22; 4329)	25.497*** (df = 23; 4419)

Note:

*0.05; **0.01; ***0.001

Reference category for Full-time employee: Low

Reference category for Full-time policy oriented: Low

Reference category for Active on: One area

Country FE. removed

Estimated with party-clustered robust standard errors.

Appendix C

Appendix C: Robustness test 2b: Reduced sample: PI

In this appendix are the main models of the analysis ran with a reduced sample. The observations from the public interest group type are removed from the sample. In the raw-data is public interest one of the largest group types, and the group type with the most heterogeneous composition¹. Public interest has 190 out of the total 857 in the raw data, tied in second place behind “Occupational/professional/assoc.” with 212 respondents. In the triadic data structure are there 2148 units from the public interest group type out of the total 9352 units.

¹see Appendix E.

Table C.1: Interest competition with reduced and whole sample

	Perceived influence	
	Reduced sample	Whole sample
	(1)	(2)
Interest competition	-1.239*** (0.238)	-0.618** (0.206)
Annual budget	0.083*** (0.017)	0.086*** (0.013)
Financial contributions	-0.140 (0.109)	-0.151 (0.104)
Full-time employee: Medium	0.073 (0.046)	0.040 (0.041)
Full-time employee: High	0.076 (0.066)	0.069 (0.052)
Full-time policy oriented: Medium	0.159** (0.049)	0.124** (0.039)
Full-time policy oriented: High	0.896*** (0.121)	0.363*** (0.103)
Joint party-group arrangements	-0.070 (0.037)	-0.102** (0.031)
Joint party-group agreements	0.218*** (0.040)	0.282*** (0.034)
Invited to events by party/party org.	0.239*** (0.043)	0.202*** (0.035)
Electoral contributions	-0.502*** (0.134)	-0.093 (0.110)
Electoral endorsements	0.058 (0.152)	-0.246 (0.132)
Ideological position	-0.114** (0.036)	-0.072* (0.033)
Active on: Two areas	-0.053 (0.090)	-0.006 (0.075)
Active on: Three areas	0.218** (0.083)	0.174** (0.067)
Group type: Business/industry/employers associations	0.130** (0.049)	0.081 (0.046)
gtype_pi		0.316*** (0.042)
Constant	0.687*** (0.101)	0.539*** (0.084)
Observations	3,197	4,443
R ²	0.132	0.118
Adjusted R ²	0.126	0.114
Residual Std. Error	0.906 (df = 3174)	0.913 (df = 4419)
F Statistic	22.002*** (df = 22; 3174)	25.795*** (df = 23; 4419)

Note:

*0.05; **0.01; ***0.001

Reference category for Full-time employee: Low

Reference category for Full-time policy oriented: Low

Reference category for Active on: One area

Country FE. removed

Estimated with heteroskedastic robust standard errors.

Table C.2: Policy area competition with reduced and whole sample

	Perceived influence	
	Reduced sample	Whole sample
	(1)	(2)
Policy area competition	-0.898* (0.373)	-0.804* (0.356)
Annual budget	0.085*** (0.016)	0.085*** (0.020)
Financial contributions	-0.184 (0.207)	-0.182 (0.202)
Full-time employee: Medium	0.070 (0.068)	0.045 (0.060)
Full-time employee: High	0.098 (0.077)	0.078 (0.089)
Full-time policy oriented: Medium	0.169* (0.070)	0.133 (0.070)
Full-time policy oriented: High	0.812*** (0.174)	0.332* (0.164)
Joint party-group arrangements	-0.062 (0.043)	-0.098** (0.031)
Joint party-group agreements	0.228*** (0.035)	0.283*** (0.032)
Invited to events by party/party org.	0.249*** (0.062)	0.217*** (0.054)
Electoral contributions	-0.441*** (0.112)	-0.065 (0.103)
Electoral endorsements	0.103 (0.209)	-0.212 (0.185)
Ideological position	-0.114 (0.060)	-0.077 (0.056)
Active on: Two areas	-0.079 (0.080)	-0.007 (0.082)
Active on: Three areas	0.190** (0.068)	0.170** (0.064)
Group type: Business/industry/employers associations	-0.047 (0.055)	-0.015 (0.053)
gtype_pi		0.244*** (0.066)
Constant	0.557*** (0.093)	0.504*** (0.101)
Observations	3,197	4,443
R ²	0.126	0.117
Adjusted R ²	0.120	0.113
Residual Std. Error	0.909 (df = 3174)	0.914 (df = 4419)
F Statistic	20.742*** (df = 22; 3174)	25.497*** (df = 23; 4419)

Note:

*0.05; **0.01; ***0.001

Reference category for Full-time employee: Low

Reference category for Full-time policy oriented: Low

Reference category for Active on: One area

Country FE. removed

Estimated with party-clustered robust standard errors.

Appendix D

Appendix D: Robustness test 2c:

Reduced sample:

Business/finance/employers assoc.

In this appendix are the main models of the analysis ran with a reduced sample. The observations from the business/industry/employers assoc. group type are removed from the sample. Business/industry/employers assoc. is a large group type, while also being the group type with most response bias compared to the amount of groups invited. There were 907 business/industry/employers assoc. groups invited, while only 190 responded¹. Business/industry/employers assoc. are also given special attention in the literature due to them commonly being stronger in resources and organizational terms.

¹See Appendix E.

Table D.1: Interest competition with reduced and whole sample

	Perceived influence	
	Reduced sample	Whole sample
	(1)	(2)
Interest competition	-0.681** (0.246)	-0.618** (0.206)
Annual budget	0.107*** (0.015)	0.086*** (0.013)
Financial contributions	-0.260 (0.192)	-0.151 (0.104)
Full-time employee: Medium	-0.021 (0.053)	0.040 (0.041)
Full-time employee: High	0.023 (0.060)	0.069 (0.052)
Full-time policy oriented: Medium	0.160*** (0.048)	0.124** (0.039)
Full-time policy oriented: High	0.228 (0.129)	0.363*** (0.103)
Joint party-group arrangements	-0.077 (0.041)	-0.102** (0.031)
Joint party-group agreements	0.270*** (0.044)	0.282*** (0.034)
Invited to events by party/party org.	0.193*** (0.042)	0.202*** (0.035)
Electoral contributions	0.001 (0.131)	-0.093 (0.110)
Electoral endorsements	-0.207 (0.209)	-0.246 (0.132)
Ideological position	-0.086 (0.045)	-0.072* (0.033)
Active on: Two areas	-0.113 (0.089)	-0.006 (0.075)
Active on: Three areas	0.088 (0.079)	0.174** (0.067)
Group type: Business/industry/employers associations		0.081 (0.046)
gtype_pi	0.307*** (0.046)	0.316*** (0.042)
Constant	0.587*** (0.102)	0.539*** (0.084)
Observations	3,143	4,443
R ²	0.120	0.118
Adjusted R ²	0.114	0.114
Residual Std. Error	0.920 (df = 3120)	0.913 (df = 4419)
F Statistic	19.378*** (df = 22; 3120)	25.795*** (df = 23; 4419)

Note:

*0.05; **0.01; ***0.001

Reference category for Full-time employee: Low

Reference category for Full-time policy oriented: Low

Reference category for Active on: One area

Country FE. removed

Estimated with heteroskedastic robust standard errors.

Table D.2: Policy area competition with reduced and whole sample

	Perceived influence	
	Reduced sample	Whole sample
	(1)	(2)
Policy area competition	0.012 (0.397)	-0.804* (0.356)
Annual budget	0.102*** (0.022)	0.085*** (0.020)
Financial contributions	-0.207 (0.275)	-0.182 (0.202)
Full-time employee: Medium	-0.011 (0.070)	0.045 (0.060)
Full-time employee: High	0.036 (0.088)	0.078 (0.089)
Full-time policy oriented: Medium	0.164 (0.086)	0.133 (0.070)
Full-time policy oriented: High	0.187 (0.214)	0.332* (0.164)
Joint party-group arrangements	-0.064 (0.039)	-0.098** (0.031)
Joint party-group agreements	0.255*** (0.045)	0.283*** (0.032)
Invited to events by party/party org.	0.218*** (0.059)	0.217*** (0.054)
Electoral contributions	0.032 (0.139)	-0.065 (0.103)
Electoral endorsements	-0.241 (0.189)	-0.212 (0.185)
Ideological position	-0.078 (0.056)	-0.077 (0.056)
Active on: Two areas	-0.102 (0.091)	-0.007 (0.082)
Active on: Three areas	0.092 (0.075)	0.170** (0.064)
Group type: Business/industry/employeers associations		-0.015 (0.053)
gtype_pi	0.234*** (0.064)	0.244*** (0.066)
Constant	0.488*** (0.124)	0.504*** (0.101)
Observations	3,143	4,443
R ²	0.118	0.117
Adjusted R ²	0.112	0.113
Residual Std. Error	0.921 (df = 3120)	0.914 (df = 4419)
F Statistic	19.026*** (df = 22; 3120)	25.497*** (df = 23; 4419)

Note:

*0.05; **0.01; ***0.001

Reference category for Full-time employee: Low

Reference category for Full-time policy oriented: Low

Reference category for Active on: One area

Country FE. removed

Estimated with party-clustered robust standard errors.

Appendix E

Appendix E: Robustness test 3: Interaction models

In this appendix are intersect models included. Table E.1 show the intersect between: interest competition and group's position in country. The model is estimated with heteroskedastic robust standard errors.

By including an interaction between the interest competition variable and the group's position in country variable, the relation between the two variables which indicates the relationship between same-interest groups is analysed.

The intersect coefficient is significant which firstly tells us that the main effect, which in this case is the negative effect of interest competition effect, can not be drawn conclusions from solely. As the intersect is significant it indicates that there is possible to draw some "it depends" knowledge from the model (Christophersen, 2013). In this case, one could ask whether if high or low density scores determinates the groups perceived influence - and the answer would be it depends on the group's position in the given country. And the other way around.

Table E.2 show the intersect between: policy area competition and group's position in country. The model is estimated with both heteroskedastic robust standard errors and party-clustered robust standard errors. In the second model, estimated with clustered robust standard errors on the "party" variable, is the estimate for the intersect significant. Competition in the policy area dimension is hence dependent on the groups' position in country in determining the effect on influence.

Table E.1: Interest competition intersect group's position in country

	Perceived influence
Interest competition	-1.443*** (0.302)
Group's position in country	-0.110** (0.035)
Annual budget	0.054*** (0.014)
Financial contributions	-0.060 (0.108)
Full-time employee: Medium	0.080 (0.043)
Full-time employee: High	0.125* (0.053)
Full-time policy oriented: Medium	0.052 (0.042)
Full-time policy oriented: High	0.183 (0.121)
Joint party-group arrangements	-0.091** (0.033)
Joint party-group agreements	0.248*** (0.036)
Invited to events by party/party org.	0.270*** (0.037)
Electoral contributions	-0.061 (0.114)
Electoral endorsements	-0.341* (0.148)
Ideological position	-0.00000 (0.036)
Active on: Two areas	-0.065 (0.081)
Active on: Three areas	0.060 (0.073)
Group type: Business/industry/employeers associations	0.101* (0.048)
Group type: Public interest	0.226*** (0.047)
Competition*Group position	0.893*** (0.179)
Constant	0.778*** (0.106)
Observations	3,938
R ²	0.113
Adjusted R ²	0.107
Residual Std. Error	0.915 (df = 3912)
F Statistic	19.873*** (df = 25; 3912)

Note:

*0.05; **0.01; ***0.001

Country FE. removed

Estimated with heteroskedastic robust standard errors.

Table E.2: Policy area competition intersect group's position in country

	Perceived influence	
	HC0 Robust SE	Clustered-robust SE
	(1)	(2)
Policy area competition	-1.732* (0.742)	-1.732*** (0.442)
Group's position in country	-0.006 (0.036)	-0.006 (0.038)
Annual budget	0.063*** (0.014)	0.063** (0.019)
Financial contributions	-0.157 (0.106)	-0.157 (0.209)
Full-time employee: Medium	0.097* (0.043)	0.097 (0.056)
Full-time employee: High	0.118* (0.053)	0.118 (0.082)
Full-time policy oriented: Medium	0.073 (0.042)	0.073 (0.072)
Full-time policy oriented: High	0.207 (0.120)	0.207 (0.187)
Joint party-group arrangements	-0.104** (0.033)	-0.104** (0.034)
Joint party-group agreements	0.262*** (0.036)	0.262*** (0.031)
Invited to events by party/party org.	0.287*** (0.037)	0.287*** (0.066)
Electoral contributions	0.018 (0.112)	0.018 (0.104)
Electoral endorsements	-0.327* (0.147)	-0.327 (0.215)
Ideological position	-0.028 (0.036)	-0.028 (0.063)
Active on: Two areas	-0.077 (0.082)	-0.077 (0.093)
Active on: Three areas	0.040 (0.074)	0.040 (0.078)
Group type: Business/industry/employees associations	0.005 (0.039)	0.005 (0.057)
Group type: Public interest	0.221*** (0.040)	0.221** (0.073)
Competition*Group position	0.883 (0.502)	0.883* (0.393)
Constant	0.598*** (0.106)	0.598*** (0.122)
Observations	3,938	3,938
R ²	0.108	0.108
Adjusted R ²	0.102	0.102
Residual Std. Error (df = 3912)	0.918	0.918
F Statistic (df = 25; 3912)	18.853***	18.853***

Note:

*0.05; **0.01; ***0.001

Country FE. removed

Table E.3 show the intersect between: interest competition and policy area competition. The model is estimated with both heteroskedastic robust standard errors and party-clustered robust standard errors.

The two dimensions are identified as separate dimensions in the theoretical framework due to several different specifications. In the interest competition dimension is the uniqueness of the interest which the group identifies itself the central indicator. In the policy area dimension is the interest aggregated, and the groups are identified through their activity on policy areas. Competition between these two dimensions is hence not discussed in a relational nor conflicting manner. This is supported by the models in Table E.3, which tests this interaction.

Interest competition, policy area competition and the interaction between them are all left with non-significant estimates.

Table E.3: Interest competition intersect policy area competition

	Perceived influence	
	HC0 Robust SE	Clustered-robust SE
	(1)	(2)
Interest competition	-0.270 (0.368)	-0.270 (0.385)
Policy area competition	0.391 (1.114)	0.391 (0.691)
Annual budget	0.086*** (0.013)	0.086*** (0.020)
Financial contributions	-0.165 (0.104)	-0.165 (0.196)
Full-time employee: Medium	0.042 (0.041)	0.042 (0.060)
Full-time employee: High	0.066 (0.052)	0.066 (0.092)
Full-time policy oriented: Medium	0.126** (0.039)	0.126 (0.066)
Full-time policy oriented: High	0.371*** (0.103)	0.371* (0.157)
Joint party-group arrangements	-0.102** (0.031)	-0.102*** (0.030)
Joint party-group agreements	0.281*** (0.034)	0.281*** (0.033)
Invited to events by party/party org.	0.204*** (0.035)	0.204*** (0.054)
Electoral contributions	-0.088 (0.110)	-0.088 (0.101)
Electoral endorsements	-0.239 (0.132)	-0.239 (0.182)
Ideological position	-0.075* (0.033)	-0.075 (0.056)
Active on: Two areas	-0.013 (0.076)	-0.013 (0.083)
Active on: Three areas	0.161* (0.067)	0.161* (0.065)
Group type: Business/industry/employees associations	0.069 (0.046)	0.069 (0.057)
Group type: Public interest	0.306*** (0.043)	0.306*** (0.072)
Interest*Policy area	-5.816 (5.321)	-5.816 (3.398)
Constant	0.532*** (0.106)	0.532*** (0.099)
Observations	4,443	4,443
R ²	0.119	0.119
Adjusted R ²	0.114	0.114
Residual Std. Error (df = 4417)	0.913	0.913
F Statistic (df = 25; 4417)	23.872***	23.872***

Note:

*0.05; **0.01; ***0.001

Country FE. removed

In Figure E.1 are the two lines visually showing the interaction between interest and groups position. The *red* line is the cases where groups have reported to be the only group representing the given interest, in that country¹. The *blue* line is the cases where groups have reported to share their interest with one. Both lines show a negative effect, but between 0.1 and 0.2 is the effect less steep as it is dependent on the groups position in country. This interpretation is obviously moderated by the confidence interval of the two lines which is are colliding almost throughout the figure. This means that the interpretation is insecure.

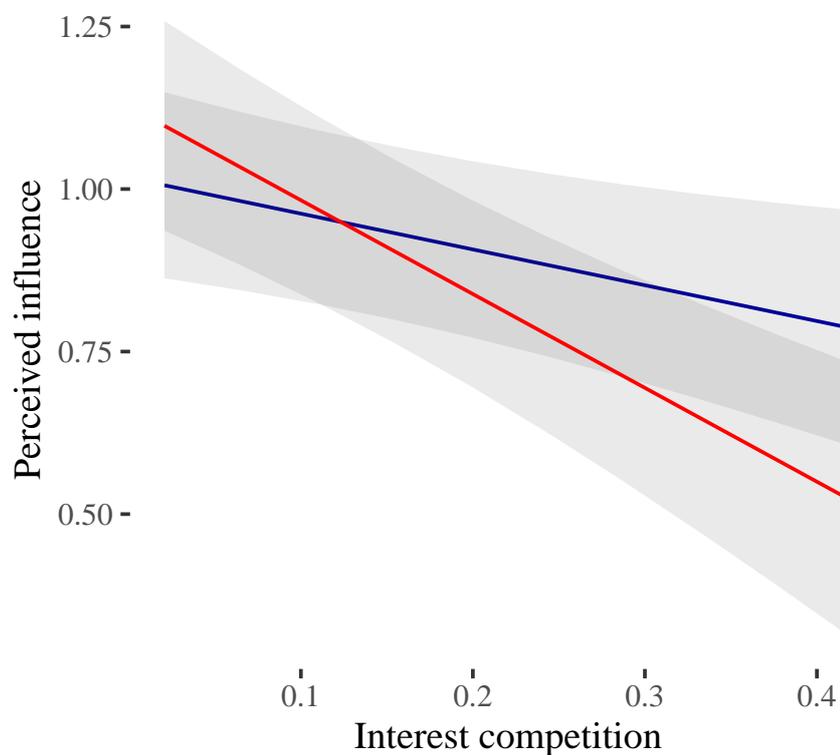
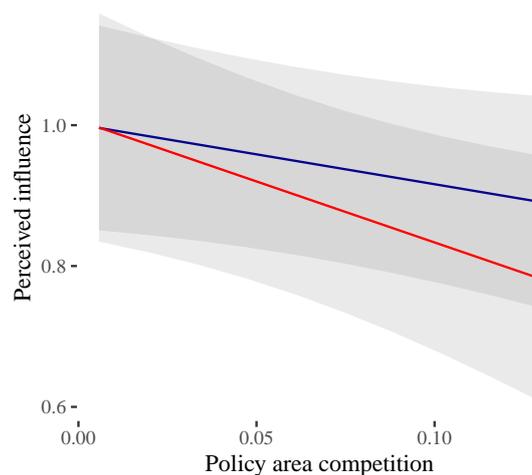
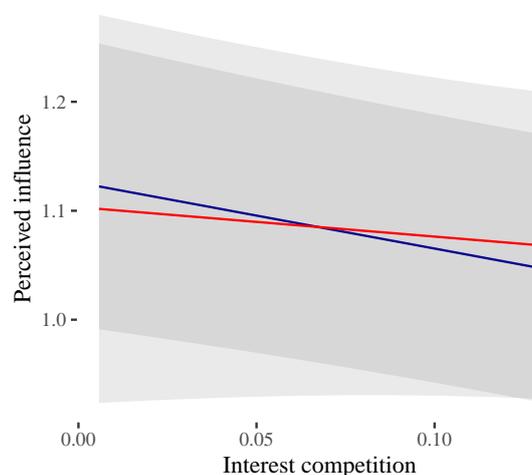


Figure E.1: Interactionplot: Interest competition and group's position in country

¹The data for the plot are predicted, and some values are chosen. The plotted data is predicted on the Norwegian cases.



(a) Policy area and group's position intersect



(b) Interest comp. and Policy area comp. intersect

In Figure E.2a and Figure E.2a are the interactions between policy area competition and group's position in country, and interest competition and policy area competition shown. The figures show the uncertainty with the confidence interval for both lines covering each other throughout the whole figure. This represents the common uncertainty linked with intersect-models, which is difficult to discover in a regression table.

Appendix F

Appendix F: Group overview and response(PAIRDEM)

Below is the coding scheme for the group types(interests) in the PAIRDEM survey shown. The table is from the PAIRDEM documentation report (Elin H. Allern et al., 2020).

Below are the number of invited groups and number of responding groups in the PAIRDEM survey depicted, according to interests (Elin H. Allern et al., 2020).

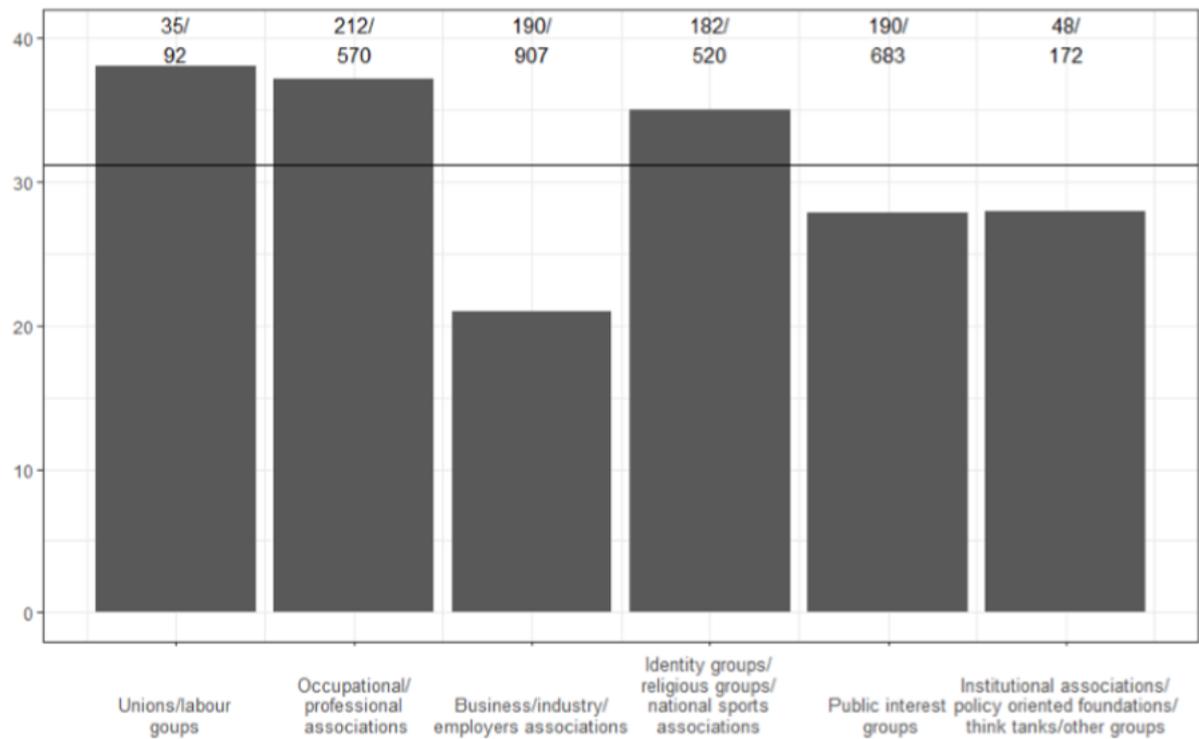


Figure F.1: Response rate by group type

Table F.1: Group coding scheme specifications

Code	Main category	Definition	Examples of sub-types
10	Unions	Associations of employees negotiating work-related terms and conditions	Industry union Craft union General union Labour groups
20	Occupational/professional assoc.	Employee associations whose membership is restricted to members of the same or similar professional area. They may but do not always negotiate terms and conditions	Occupational assoc. (union) Professional assoc. (union) Academic societies
30	Industry/business/employers groups	Associations of firms(incl. both sector- specific and cross-sector groups) and of self-employed.	Agricultural/farm/fisheries/forestry groups Employers'/business/trade/industry/manufacturing groups
40	Companies	Not relevant for thesis.	
50	Institutional assoc.	Associations of public authorities or institutions	Associations of local/regional authorities Associations of other public insitutions Other institutional associations
60	Identity groups	Associations/advocacy groups where members/supporters/targets have a selective interest in group goals (not work related)	Patients Elderly Students Women Racial or ethnic Sexual orientation - LGBT Disabled Veterans
70	National sports assoc.	Associations for multiple or separate sports	

80	Religious/Philosophy of life groups	National religious communities and associations of people sharing a religion or philosophy of life	Autonomous state churches (if applicable) National religious communities (churches) Inter-faith/non-religious
90	Public Interest groups	Associations/advocacy groups where members/supporters/targets do not have a selective interest in group goals	Environment and animal welfare Humanitarian/development/foreign aid groups - international Humanitarian/development/foreign aid groups - domestic Pro-immigration groups and anti-immigration groups Consumer groups Relevant charity foundations
100	Public oriented foundations and think tanks		Private think tanks and policy/research institutes/foundations performing research and advocacy concerning various topics
110	Other		

Below are the number of invited groups and number of responding groups in the PAIRDEM survey depicted, according to country (Elin H. Allern et al., 2020).

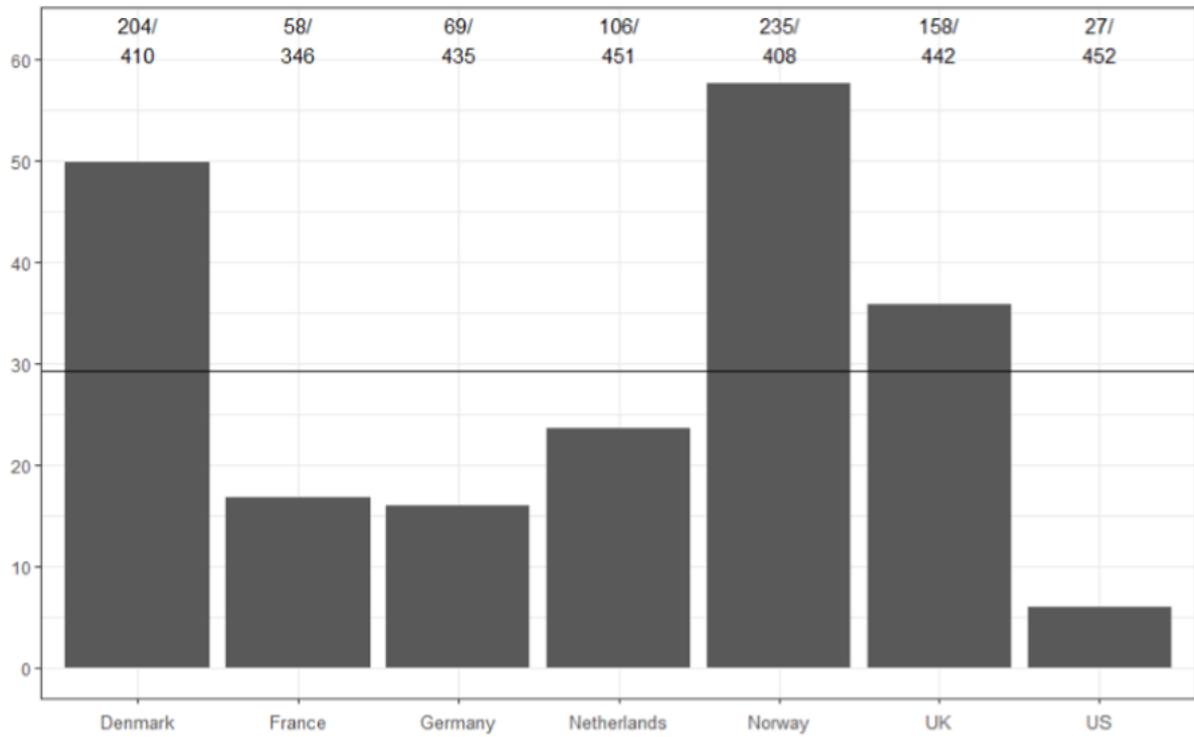


Figure F.2: Response rate by country