

Development of the Danish Interest Group Population

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Introduction

Interest groups are important players in modern democracies as they are assumed to give the citizens democratic competencies, contribute to the public debate, and channel citizens' communication to and control with decision makers (Halpin, 2010; Warren, 2001). Several studies have investigated how interest groups influence politics (Binderkrantz, 2005), and most scholars agree that interest groups are important political actors. Therefore, it is crucial which interests are represented and which are not, and the question of group mobilization is a central topic in political science (Schlozman, 2010). This project will investigate how the total population of Danish interest groups looks, how it has developed between 1946 and 2011, and which factors can explain the development. Interest groups are defined as formal organizations that work on the national level and seek to influence public policy but who do not run for elections. An interest group population is defined as the total number of existing interest groups within a system.

Classical studies as Truman (1951) and Olson (1965) have treated the question of mobilization, but traditionally scholars have looked at it from the perspective of the individual group. An important stream in the newer literature on mobilization is the population level studies. Several population level studies have shown that mobilization cannot be understood only from the perspective of the individual groups, but that it should also be studied from the population perspective (Gray and Lowery, 1996a; Nownes, 2004). The core of population level studies is a focus on the life and death of interest groups, the number of groups in existence, and questions about which factors in the population's environment regulate group numbers (see Lowery, 2012 for an overview of the approach). As data on the entire population is needed, population studies are obviously a time consuming task, and one of the questions often raised to this kind of studies is: why should we even care about group numbers? In the broader literature, it is accepted that there is some linkage between democracy and group proliferation, and as Jordan and Greenan (2012: 70) phrase it: "If interest groups have an important role in governance arrangements, the number and types of associations or groups are important."

In the investigation of how interest group populations are comprised this project will focus on two dimensions. First, how is the population comprised in regard to who is represented? Which group types exist? Is the interests of business, labor, and the broader public equally represented? Equal representation of these group types is fundamental to democracy, but multiple authors have suggested that there is a bias in the representation. Schattschneider (1960) observed that latent interests in society are not automatically represented, and that the poor and the broad public are likely to remain unorganized. Schlozman (1984; 2010) found in her empirical studies that there is a bias towards business interests. However, this dimension is not the only one of importance. A second dimension concerns how the population is comprised in regard to which policy areas groups mobilize on. The involvement of groups is

not evenly distributed across policy areas, and the rate of mobilization across policy areas probably also changes over time. If the population's development is only viewed in relation to group types some important dynamics is overlooked as changes in policy often involves distinct policy areas but not distinct group types. What governments do has a profound impact on the number and mix of interest groups and these effects would be overlooked with a narrow focus on group types. Changes in the environment policy may have an effect on the mobilization of environment groups but not on humanitarian groups, even though these would be considered the same group type (public interest groups).

Hence, as interest groups are important political players it is crucial to know which interest are represented, how this pattern of representation changes over time, and what can explain the change in group numbers. A sketch of the long-term development of an interest group population will make it possible to investigate what factors influence the number of interest groups. However, to date there is still a limited amount of studies that actually map entire populations. Furthermore, the lion's share of the population level studies map populations only at one point in time (Lowery and Gray, 1995; Schlozman and Tierney, 1986; Wonka et al., 2010). Very few studies are conducted that map development of populations over time (exceptions are Jordan et. al (2012) and Nownes (2004; 2010)). Some of the most fundamental concepts when looking at interest group populations are the population density (the number of groups), the diversity and the volatility (Hanegraaff et al., 2012). These concepts are interesting in themselves, but a study that track a population over an extended time period will give us important knowledge about what the pattern of representation look like, how it has changed over time, and it will give us an opportunity to investigate which factors influence the mobilization of groups. Hence, there is a need for a fuller and more thorough description of interest group populations over time as the group field typically lacks pre-existing data that allows us to observe the degree of change (Jordan and Greenan, 2012: 70). In addition to this, almost all population level studies are conducted in an American context where the interest representation system is characterized by pluralism. The literature about corporatism suggests that there are differences between pluralist and corporative environments, and this may affect the dynamics within populations and thereby their development. Therefore, the results from the American population studies cannot necessarily be generalized to corporative environments.

This project will map the total population of Danish interest groups from 1946 till 2011 and investigate which factors can explain the variation in group numbers over time and between policy areas. The projects research question is:

How do populations of interest groups develop over time and which factors can explain the development?

Making an overview of a population over an extended period of time will be a valuable contribution to the literature about interest groups for several reasons. First, there is in general a lack of studies that thoroughly map total populations of interest groups. Second, only few studies map populations over several decades so we have little knowledge about the long term development. Third, and as a consequence of this lack of general descriptions, no studies have investigated which factors can explain the development of an interest group population over time. Last, as almost all population studies are conducted in an American context we have little knowledge about how corporative structures affect populations' development.

Defining the population

This project will define an interest group population as the total number of existing interest groups within a system. However, the way other population studies define their populations varies somehow. Both in regard to the scope, as some authors use the term population as a synonym for total – e.g. all interest groups in the Danish system. Other defines populations more narrowly as all groups of the same kind e.g. the population of patient groups or the population of gay and lesbian groups (Nownes, 2004; 2010). More importantly some authors define populations as all groups that are policy active (Halpin and Thomas, 2012; Lowery and Gray, 1995) while others include all existing groups (Nownes, 2004; 2010), and how the population is defined in this regard can have important consequences for the results. Many studies are constrained by data availability and therefore only look at the population of policy active groups. Studies that use lobby registrations to define the population will inevitably only include groups that are policy active at the time point under investigation (this is the case for e.g. Leech et al., 2005; Lowery and Gray, 1995). However, this is not without problems as the core of the population studies are questions about the life, death and lifecycles of groups, and not just whether they are policy active in a specific year or not. Many groups go into periodical policy hibernation and may not be policy active in all years, as they may not always have a specific case to fight for. But this does not mean that they are dead. Therefore, defining the population in regard to policy active groups gives problems estimating some of the core concepts. The population's density will be understated, while the population's volatility will be overstated. It is much more in tune with the population approach to define the population as all existing interest groups. Even though a group is not policy active this year, it is still a part of the population, and other groups will still be aware of its existence. Some studies do attempt to map the population of all existing groups, Schlozman (1984; 2010), Jordan and Greenan (2012), and Jordan et al. (2012) all use directories or encyclopedias of interest groups as population lists. These do not require that the group is policy active in a specific year and therefore include more groups than simply the policy active, but still the groups has to be on the radar of

the directories to be included, why some of the smaller groups may be neglected (see Nownes, 2012 for a discussion of the problems with using encyclopedias). This project will construct population lists from multiple sources to secure a more valid picture of the total population and its development. This will make a valuable contribution to the literature as the project investigates dynamics within the broader population of all existing groups and not just the policy active.

Previous studies about development of interest group populations

The dependent variable in the project is the composition of the interest group population. How many groups exist? How are they distributed across group types and policy areas? And how does this change over time? As described the population level studies are a relatively new approach within the literature of interest groups, however some earlier studies are actually also concerned with the composition of populations even though they are not as explicit about it. One of the most well-known is probably the study conducted by Schlozman (1984). By examining each entry in the 1981 edition of the *Washington Representatives* directory she maps the total population of political organizations in Washington. The goal of this study is to examine whether the pressure system is biased and she finds that “the pressure system is tilted heavily in favor of the well-off, especially business” (Schlozman, 1984: 1028). This study is obviously very informative when it comes to the composition of the population, but as it only examines one point in time it does not tell us anything about the development or changes in the population. However, in a later study (Schlozman, 2010) she expands her dataset to cover all 27.000 organizations listed in the *Washington Representatives* directory in the years 1981, 1991, 2001, and 2006 and categorizes these into 98 different categories. Even though it is not the primary goal of this study to describe how the population develops, it does give an indication of how the distribution of organizations in the different categories change between the four time-periods as well as the volatility of the system – how many of the organizations listed in the 1981 directory was still in existence in 2006 and vice versa. As in the 1984 study the conclusion is that organizations advocating on behalf of broad public interests or the resource-deprived are underrepresented. Furthermore, there have been an overall expansion in the number of political organizations, but this is accompanied by considerable fluidity as there is a high turnover rate in the organized interest community. Only a third of the organizations listed in a 1981 appeared in all four directories. However, she finds that there is continuity in the kind of interests that are represented.

Compared to Schlozman, Berry (1999) has a more explicit focus on change. He does not investigate a total population but focus on interest groups active in three different sessions of congress in 1963, 1979, and 1991. He classifies these groups into group types which makes it possible to track changes in the composition of this subpopulation. Compared to most other studies Berry has a rather long time-

perspective, but as he only focus on the legislative arena his data is not real population data, as it is defined in this project.

Gray and Lowery (1996b) were among the first to directly deal with questions about interest group populations. They unite theory and data specially designed to the population level in the population ecology framework inspired by organizational ecology (see Hannan and Freeman, 1989). They use lobby registration data to construct their population lists for the lobbying community in the US for the years 1975, 1980 and 1990. Therefore, their population only contains the groups that are policy active in the specific years. As their focus is the lobbying community their population is not comprised only of policy active interest groups but also of institutions, corporations etc. The main contribution of their study is the development the *Energy-Stability-Area* model that aims to explain variations in the population's density and diversity (this model will be discussed further below). They test this model in all three years and compare the results, but their main focus is not on population changes. Their lobby registration data are used in a range of studies, and in later studies they have extended these data and have a more explicit focus on population changes. In Gray and Lowery (2001a) they use data for 50 states for the years 1990 and 1997 and directly compare the 1990 population with the 1997 population. They focus on which groups survived between 1990 and 1997, and which groups died in the period. Furthermore, they develop a model that explain the 1997 birth- and death rates with the 1990 density (note that they consider a group dead simply because it is not policy active. However, the group may still exist and this can be considered a rather serious problem with their studies). In Gray and Lowery (2001b) the focus is shifted towards group type as they examine changes in the population on two dimensions: the range of substantive interests (27 categories of substantive interests are developed) and the organizational type (whether the organization is an institution, association or membership groups) for the years 1980, 1990, and 1997. Anderson et. al (2004) extends the data further to include the years 1990, 1997, 1998 and 1999 and focus on organizational persistence. They do this by analyzing the short-term volatility in the population to identify what kinds of organizations are persistent and what kinds have shorter lifetimes. Their conclusion is that interest organizations are far less persistent than expected, that turnover rates are high, and that persistence is unevenly distributed both across the range of substantive interests and organizational types. However, as discussed a consequence of using only policy active groups as population is that volatility or turnover rates are overestimated. A few studies have applied the population approach to populations outside the US. Wonka et al. (2010) have gathered a lobby registration dataset similar to Lowery and Grays', but in the EU context. Messer et al. (2011) have tested the ESA-model on a sample of the population of policy active groups in the EU interest group system at one point in time.

Compared to Gray and Lowery's data that only contains policy active groups, Nownes (2004; 2010) has a very different approach as his population is comprised of all groups in existence in the population's lifetime. His studies are time-series studies as he focuses on the subpopulations of gay and lesbian groups (2004) and transgender groups (2010) and map the populations over an extended period of time. In both studies he use the population ecology approach and show that these subpopulations develop as expected by the theory of density dependency – the birthrate of the population are explained by the population's density. As he focus on the population of all existing interest groups his data fits very well with the population line of thought, and the description of how the subpopulations has developed is very informative.

To date the most comprehensive descriptive study of how a total population of all existing interest groups has developed over time are probably Jordan and Greenan (2012) and Jordan et al (2012). Jordan and Greenan (2012) count group entries in the 1970, 1992, and 2007 issues of the *Directory of British Associations* to get a picture of the development of the British interest group population. They examine the development in the total number of groups reported in the directories as well as the distribution of groups by sector and by field of interest. Jordan et al. (2012) compares the data from Jordan and Greenan (2012) with data on development of the US interest group population from the *US Encyclopedia of Associations*. They examine both the total number of national associations in the US and the UK over time, trends in group numbers distributed by sector using the categories from the two directories respectively (from 1959-2005 in the US and in the years 1970, 1992 and 2006 in the UK) and trends in group numbers by sector, using the categories from the Policy Agendas Project (for the years 1975, 1985, 1995 and 2005 in the US and the years 1970 and 2006 in the UK).

In conclusion there are generally few population studies and even fewer that thoroughly investigate how populations change over time. A study that makes a thorough investigation of how a total population of all existing groups develops over an extended period of time will therefore make a valuable contribution to the literature about interest group populations. Furthermore, a long-term overview of a population's development will give the opportunity to investigate which factors can explain the mobilization and thereby the density of interest groups. The next section will set up some theoretical expectations about this.

Theoretical expectations about what explains the development of populations

The independent variables in the project are the factors that explain the development in group numbers over time. How the distribution of different interest groups looks like and how this change over time is interesting in itself as it says something about who and which policy areas are represented, and whether the system is biased. Therefore, it is also important which factors can explain the variation in the number of interest groups – the population's density. In the end this comes down to a question about why interest groups emerge. Looking at this from the population level gives rise to a distinction between demand and supply mechanisms. Both mechanisms concerns factors in the population's environment. The demand argument stress that needs in society and the actions of government can explain how many groups mobilize. The government can provide incentives for groups to mobilize, so in this way groups may proliferate as a response to growth of government activities as e.g. new governmental programs. However, a supply of potential members is also needed in order to facilitate mobilization. As Gray et al. (2005: 405) phrase it: "polities, issue sectors, or interest guilds with higher numbers of potential members are better able to support large numbers of organized interests than those with few".

Different authors have used these mechanisms to explain mobilization. As discussed Lowery and Gray (1995) are the first to develop a population level model that explains population density, the *Energy-Stability-Area* model (ESA model). This model assumes that environmental constraints determine the density of an interest group population. The model considers three factors in the population's environment: energy, stability, and area. This model is also divided into a supply and a demand component.

The area term represents the space or the breadth of the niche in which interest groups may survive (Messer et al., 2011: 169). This is the supply term of the model, and it is defined as the supply of potential members provided by society or the number of potential constituents the groups may serve (Lowery and Gray 1995: 10). The relationship between area and density is expected to be positive and curvilinear. A growth in the number of potential constituents will initially give the groups better opportunities to get members and increase the density, if there are more environmentalists there will be more environmental interest groups. But this is true only up to a certain level of density. As the size of the potential constituency increases further, groups are expected to specialize and this increases competition: *"Competition increases because, as interest organizations becomes more-specialized, the marginal utility of an additional, more specialized group should decline."*(Lowery and Gray, 1995: 10).

Energy is the demand term. It represents the political energy or resources needed to sustain the population. It is defined as the interest from the constituent, and the interest and actions of government on a policy area. The relationship between energy and density is expected to be positive, as more energy means that more groups can be supported within the environment.

Stability is absence of fluctuations in the population's environment. For interest groups this corresponds to a stable policy environment. Instability created by exogenous shocks can stress the population and lead to extinction. Lowery and Gray (1995: 12) measure stability as the age of the interest group population, and they expect that older populations are more stable, and thereby denser. However, other studies suggest that environmental stability should be interpreted in another way: when political systems collapse entirely the interest population must begin growing from scratch. And this is only of theoretical and not empirical relevance for the Danish case, why stability will not be discussed further in the project.

Other authors than Lowery and Gray have tested theoretical expectations similar to those from the ESA model, although without using the ESA model's terms. Leech et al. (2005) investigate only the demand mechanism, how the political environment affects the number of interest groups in Washington. They hypothesize that levels of lobbying will increase as the government activity increases, further they expect that these processes are issue-specific. They test these expectations on time-series data but only for a short time period (1996-2000) so their primary focus is on variation between policy issues. They find that government activity measured by hearings in congress and size of budget has a positive effect on the number of groups lobbying on an issue.

As was the case for the more descriptive studies of how populations develop (discussed above), studies of how these supply and demand mechanisms affect the number of interest groups has mainly been conducted with cross-sectional studies. The ESA model has been used in several studies to explain variation in density between American states at one point in time (Lowery and Gray, 1995), and the model has also been applied to a sample of interest organizations in the EU to explain variation in density between interest guilds at one point in time (Messer et al., 2011). Leech et al. does have a time perspective but only a very short one, as they have data for the years between 1996 and 2000. No studies have, to my knowledge, investigated which factors explain variation in the number of interest groups in a total population over an extended time-period.

A longer time perspective may be very important for two reasons, first both the supply and demand mechanisms work on an aggregated level and may therefore need more than a few years to work. If we want to study how these mechanisms really work we need a longer time frame. Second, interest groups are not set up and established from day to day. Therefore, there may be a time lag between the need for representation (supply or demand driven) and the actual appearance of a group. Besides the need for studies with a longer time-perspective there is also a lack of studies of populations in other settings than the American pluralist environment. As discussed almost all studies are conducted on populations in the US and populations may develop differently in other settings.

Why should populations develop differently in corporative environments?

Theories of interest group populations as the ESA-model are developed by American scholars and most often tested on American populations of interest groups in pluralistic environments. As Messer et al. (2011) argue the theoretical foundation for the population models are quite general, so there is reason to believe that these theories can be applied to other contexts than the American. However, the literature about corporatism assumes that there are some differences between pluralist and corporative environments that may potentially affect how populations develop.

In pluralist environments it is assumed that all groups can approach policy makers and the administration directly as the decision-making process is relatively open, and no groups have special privileges. Therefore, groups have many ways to influence political decisions, and a broad range of different resources are decisive for gaining influence. As everyone can potentially get influence there is a high degree of competition among the groups (Christiansen and Nørgaard, 2003: 31).

Corporatism is originally defined as a system of interest representation with a limited number of compulsory, noncompetitive, hierarchically ordered and functionally differentiated interest groups (Schmitter, 1974). The state privileges some groups by granting them representational monopoly of specific interests, and in return the groups control their members' demands and supports. Having a privileged position and engaging in cooperation with the state is therefore the most important way for groups to influence the political process in corporative environments (Binderkrantz, 2005). The interest groups' cooperation with government often works through specific institutional devices such as participation in advisory committees or interest group consultation in the preparation of legislation. In contrast to pluralist systems, the involvement of interests in corporative systems is institutionalized, and selected groups have a privileged position in the cooperation with government. Therefore, many policy areas have a strong pattern of representation with a few big peak groups that have strong connections to the policy makers.

A basic assumption in the population approach is that interest groups work in a competitive environment where they compete with like groups (Lowery, 2012). While competition between interest groups is one of the defining features of pluralist environments, it is far less important in corporative environments, as some groups are granted representational monopoly, which in the extreme means that there should be no competition at all. Hence, part of the foundation for the population theories is not present in an ideal type corporatist environment. However, the assumption about no competition should probably be relaxed, as interest groups must be expected to compete to some degree even in the most corporative environments. But it can be expected that there is both qualitative and quantitative differences between pluralist and corporative environments in the degree of competition between the population's interest groups.

Quantitatively there may be a higher level of competition in pluralist environments, as these are expected to be very open and relatively easy for new groups to enter (Baumgartner and Leech, 1998: 48). If an actor has a specific interest he or she may approach decision makers directly or form a group to represent that specific interest. Contrary, in corporative environments, actors will typically not approach decision makers directly or form a new group but rather let an already existing group represent their interest. This is because the strong and well established groups that already exist may have better chances to get in contact with decision makers, maybe even through a formalized channel as representation in boards or committees.

Qualitative differences can also be expected as groups in corporative systems compete for other resources than groups in pluralist systems. As the most important way of getting influence in corporative systems is by gaining a privileged position in the decision making process, the groups may compete for these privileged positions and for monopoly on representing specific interests. This kind of competition is less relevant in pluralist systems where the groups to a higher extent compete for members and financial resources.

Consequently, the corporative structures may alter the way the population develops as they may suppress the competition mechanism and the number of interest groups. Therefore, interest group populations in corporative environments may be more stable over time compared to pluralist populations. As the degree of corporatism is a feature of the environment that interest groups work in, this may also affect the density. The relationship between the level of corporatism and the population's density is expected to be negative as the corporative structures may suppress the number of interest groups.

Variations in the level of corporatism are traditionally investigated with cross-country analysis (Lijphart and Crepaz, 1991; Molina and Rhodes, 2002; Siaroff, 1999). However, there are also variations in the level of corporatism within countries. First, there is variation across policy areas. Some policy areas are strongly corporatized such as the Danish agriculture area, while other areas such as the Danish health area is less affected by corporatism (Christiansen, 2012; Damgaard, 1978). Second, there is variation in the level of corporatism over time, Christiansen et al. (2010) and Öberg et al. (2011) have documented that there has been a decline in the level of corporatism in the Scandinavian countries since the 1980's. This project will use this within country variation to investigate the effect of corporatism on the number of interest groups in the population.

Data and methods

Mapping the total population

The project will use the population of Danish interest groups as a case to investigate the research question. As there are no requirements for Danish interest groups to register it is no easy task to track the Danish population. To investigate how this total population changes over time I will focus on how the population was comprised in six different years: 1946, 1976, 1981, 1993, 2004 and 2011. For these years earlier research projects have already tried to estimate the population (e.g. by conducting surveys of all national interest groups) and this is a very good starting point to construct the population lists. To make sure that all groups that existed in the selected years are included I will further search for group appearances in three different arenas.

First, the media arena. In each year all issues of the large Danish newspaper *Politiken* will be searched for appearances of interest group names. *Politiken* is chosen as it has a digital archive of all published newspapers from 1884 till today. Second, the parliamentary arena. For the specific years all agendas from parliamentary committees will be searched for names of groups who appeared before the parliamentary committees (deputations). In addition to this, all letters sent to the parliamentary committees will be searched for group names. Parliamentary documents are available on the parliament's website (www.ft.dk) back to the 1985-86 session. To collect data for earlier years it will be necessary to go to the parliament's archives. Third, the administrative arena. Parliamentary documents will be searched for names of groups that participated in administrative consultations regarding specific bills, and a search for names of groups who were represented in public committees will also be conducted.

In addition to the already existing population lists and the searches in the three arenas, a range of different handbooks listing interest groups such as *Landbrugsårbog*, *Arbejdsmarkedets håndbog*, and *Patientforeningsbogen* will be examined. By using these multiple sources it will be possible to build population lists that include all existing groups and not only the ones that are policy active.

Coding of groups

All groups on the population lists will be coded according to the two dimensions mentioned in the introduction. First, by group type. I will use the coding scheme from the Interarena project (see appendix 1 or www.interarena.dk). By coding the groups according to group type it will be possible to answer questions about who is represented and how this has changed over time. Second, by the groups' major policy focus. I will use the topic classification scheme from the Danish Political-Agenda Setting project (this is a modified version of the one used by the American policy agenda project see appendix 2 or www.agendasetting.dk). By coding the groups according to which policy area they focus on, it will be possible to link the development in the number of groups to other societal developments; this will be discussed in the next section.

Factors that explain population density

As the project follows the population approach it will concentrate on the factors in the population's environment that may regulate the number of groups in the population. As discussed, different authors have earlier tried to explain the density of populations at one point in time with both supply and demand mechanisms. In line with this, I will also make a distinction between supply and demand mechanisms to investigate what explains the density of the Danish interest group population over time.

The demand concept reflects the demand for interest groups from government and society. Groups may proliferate when government activity on a policy area increases. Government activity can be measured with two indicators. First, the public expenditures to the policy area, as this measure taps the financial resources available (Leech et al., 2005 also use spending as a measure of political energy). Second, parliamentary activity on the policy area, as this measure taps how active and interested policymakers are. This is measured as the number of bills, acts and parliamentary decisions regarding the policy area, which was tabled in the specific year. A third measure of demand is the issue salience of the policy area. This measure taps the interest from the electorate. Data for expenditures can be found at Statistics Denmark, data for parliamentary activity and salience can be borrowed from the research project *Political Agenda-setting* (2011).

The supply term should reflect the supply of potential members or the potential constituency. It is no easy task to measure potential members, and different studies have used a variety of measures. Lowery and Gray (1995) use some very narrow indicators that relate directly to the number of members, e.g. the number of poor people in a state as a proxy for potential member for the welfare guild. Lowery et al. (2005) use an intermediate measure, the gross state product generated by each interest group guild. Lowery and Gray (1998) use a more aggregated measure, the total GSP in a state, to measure

potential membership. For this project I will search for an intermediate measure as e.g. the total productivity of each policy sector and use this as proxy for the potential membership.

As discussed above an additional environmental factor is especially interesting for the Danish case. This is the level of corporatism. It is expected that high levels of corporatism may lead to more stability in the population and suppress the number of groups. Öberg et al. (2011) have developed a measure for the level of corporatism over time. I will use this measure and try to supplement it with a measure of the level of corporatism on each policy area.

Method

As no previous studies have investigated how an entire interest group population develops over several decades a description of the population's development will in itself be valuable. Especially how the population has developed in relation to which group types are represented will be interesting. However, by gathering data from six different years and from multiple policy areas the data will have a panel structure. Both group numbers and the explanatory variables will vary across policy areas and across time. This gives the opportunity to use a time series cross-sectional model to investigate whether the demand and supply mechanism, and the level of corporatism can explain the variation in group numbers (Leech et al., 2005 use a similar method). As the interest groups are classified according to which policy area they focus on, it is possible to link the measures of group numbers to the indicators of supply, demand and level of corporatism.

Appendix 1

Interest group categories from the Interarena project

Unions	Associations of employees negotiating work-related terms and conditions
Blue-collar union (LO-affiliated)	
Other unions	
Other labor groups	
Business groups	Associations of firms
Peak-level business groups	
Sector-wide business groups	
Breed associations	
Technical associations	
Other business groups	
Institutional associations	Associations of public authorities or institutions
Associations of local authorities	
Associations of other public institutions	
Associations of directors	
Other institutional associations	
Occupational associations	Associations of employees not negotiating terms and conditions
Doctors' associations	
Associations of other medical professions	
Teachers' associations	
Other occupational associations	
Identity groups	Associations where members/supporters have a selective interest in group goals (not work related)
Patients	
Elderly	
Students	
Friendship groups	
Racial or ethnic	
Other identity groups	
Hobby/leisure groups	Associations of people with a common sport/leisure interest
Sport	
Other hobby/leisure	
Religious groups	Associations of people sharing a religion
Associated with the state church	
Other religious	
Public interest groups	Associations where members/supporters do not have a selective interest in group goals
Environment and animal welfare	
Humanitarian – international	
Humanitarian – national	
Consumer group	
Other public interest group	

Source: www.interarena.dk

Appendix 2

Topic classification scheme from the Danish Political-Agenda Setting Project

1	Macroeconomics
2	Personal and Civil Rights
3	Church
4	Refugees and immigrants
5	Health
6	Agriculture, Fisheries and Food
7	Labour market
8	Education
9	Culture, sports and games
10	Environment
11	Energy
12	Traffic and Infrastructure
13	Legal and Justice issues
14	Social and family issues
15	Housing
16	Business and consumer issues
17	Defense, security, disasters
18	Research, Technology, IT, telecommunications and mass media
19	Foreign affairs
20	EU
21	Greenland and Faroe Islands
22	The public sector generally
23	The relationship between the central and local level, including regional policy and local politics
24	Politics in general
25	The royals
26	Miscellaneous

Source: www.agendasetting.dk

References:

Landbrugsårbog. (annuala) Copenhagen: Royal Danish Agricultural Society.

Arbejdsmarkedets Håndbog. (annualb) Copenhagen: AOF.

Anderson J, Newmark A, Gray V and Lowery D (2004) Mayflies and Old Bulls: Organization Persistence in State Interest Communities. *State Politics & Policy Quarterly* 4(2): 140.

Balslev J (1997) *Patientforeningsbogen*. Copenhagen: Balslev Forlag.

Baumgartner FR and Leech BL (1998) *Basic Interests. The Importance of Groups in Politics and in Political Science*. Princeton, N.J.: Princeton University Press.

Berry JM, (1999) *The New Liberalism. The Rising Power of Citizen Groups*. Washington DC: Brookings Institution Press.

Binderkrantz A (2005) *Magtens Midler. Danske Interesseorganisationer Og Deres Indflydelsesstrategier*. Aarhus: Politica.

Christiansen PM (2012) The Usual Suspects: Interest Group Dynamics and Representation in Denmark. In: Halpin D and Jordan G (eds) *The Scale of Interest Organization in Democratic Politics. Data and Research Methods*. Houndmills, UK: Palgrave Macmillan, 161-179.

Christiansen PM and Nørgaard AS (2003) *Faste Forhold - Flygtige Forbindelser. Stat Og Interesseorganisationer i Danmark i Det 20. Århundrede*. Aarhus: Magtudredningen/Aarhus Universitetsforlag.

Christiansen PM, Sonne Nørgaard A, Rommetvedt H, Svensson T, Thesen G and Öberg P (2010) Varieties of democracy. *VOLUNTAS - International Journal of Voluntary and Nonprofit Organizations* 21.

Damgaard E (1978) Corporate Pluralism in Danish Law-making. *Scandinavian Political Studies* 1: 285.

Gray V and Lowery D (2001a) The Expression of Density Dependence in State Communities of Organized Interests. *American Politics Research* 29(4): 374-391.

Gray V and Lowery D (2001b) The Institutionalization of State Communities of Organized Interests. *Political Research Quarterly* 54(2): 265.

Gray V and Lowery D (1996a) A Niche Theory of Interest Representation. *The Journal of Politics* 58(01): 91.

Gray V and Lowery D (1996b) *The Population Ecology of Interest Representation. Lobbying Communities in the American States*. Ann Arbor: University of Michigan Press.

Gray V, Lowery D, Fellowes M and Anderson JL (2005) Legislative Agendas and Interest Advocacy. *American Politics Research* 33(3): 404-434.

Halpin D (2010) *Groups, Representation and Democracy: Between Promise and Practice*. Manchester: Manchester University Press.

Halpin D and Thomas HF (2012) Evaluating the Breadth of Policy Engagement by Organized Interests. *Public Administration* 90(3): 582-599.

Hanegraaff M, Beyers J and Braun C (2012) Mapping the WTO Interest Group System. In: Jordan G and Halpin D (eds) *The Scale of Interest Organization in Democratic Politics : Data and Research Methods*. New York: Palgrave Macmillan.

Hannan MT and Freeman J (1989) *Organizational Ecology*. Cambridge: Harvard University Press.

Jordan G and Greenan J (2012) The Changing Contours of British Representation. In: Halpin D and Jordan AG (eds) *The Scale of Interest Organization in Democratic Politics : Data and Research Methods*. New York: Palgrave Macmillan.

Jordan G, Baumgartner FR, McCarthy JD, Bevan S and Greenan J (2012) Tracking Interest Group Populations in the US and the UK. In: Halpin D and Jordan AG (eds) *The Scale of Interest Organization in Democratic Politics : Data and Research Methods*. New York: Palgrave Macmillan.

Leech BL, Baumgartner FR, La Pira TM and Semanko NA (2005) Drawing Lobbyists to Washington: Government Activity and the Demand for Advocacy. *Political Research Quarterly* 58(1): 19.

Lijphart A and Crepaz MML (1991) Corporatism and Consensus Democracy in Eighteen Countries: Conceptual and Empirical Linkages. *British Journal of Political Science* 21(2): pp. 235-246.

Lowery D (2012) Interest Organization Populations: the Demands of the Scale of Analysis and the Theoretical Purposes of Counting. In: Halpin D and Jordan G (eds) *The Scale of Interest Organization in Democratic Politics : Data and Research Methods*. Houndmills, UK: Palgrave Macmillan.

Lowery D and Gray V (1998) Representational Concentration and Interest Community Size: A Population Ecology Interpretation. *Political Research Quarterly* 51(4): 919-944.

Lowery D and 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): 1-29.

Lowery D, Gray V and Fellowes M (2005) Sisyphus Meets the Borg. *Journal of Theoretical Politics* 17(1): 41-74.

Messer A, Berkhout J and Lowery D (2011) The Density of the EU Interest System: A Test of the ESA Model. *British Journal of Political Science* 41(01): 161.

Molina O and Rhodes M (2002) CORPORATISM: The Past, Present, and Future of a Concept. *Annual Review of Political Science* 5(1): 305-331.

Nownes A (2012) Numbers in a Niche: A Practitioner's Guide to Mapping Gay and Lesbian Groups in the US. In: Halpin D and Jordan G (eds) *The Scale of Interest Organization in Democratic Politics : Data and Research Methods*. New York: Palgrave Macmillan, 99.

Nownes AJ (2004) The Population Ecology of Interest Group Formation: Mobilizing for Gay and Lesbian Rights in the United States, 1950–98. *British Journal of Political Science* 34(01): 49.

Nownes AJ (2010) Density Dependent Dynamics in the Population of Transgender Interest Groups in the United States, 1964-2005. *Social Science Quarterly* 91(3): 689-703.

Öberg PO, Svensson T, Christiansen PM, Nørgaard AS, Rommetvedt H and Thesen G (2011) Disrupted Exchange and Declining Corporatism: Government Authority and Interest Group Capability in Scandinavia. *Government and Opposition* 46(3): 365-391.

Olson M, Jr. (1965) *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge, Mass.: Harvard University Press.

Schattschneider EE (1960) *The Semisovereign People: A Realist's View of Democracy in America*. New York: Holt, Rinehart and Winston.

Schlozman KL (2010) Who Sings in the Heavenly Chorus? The Shape of the Organized Interest System. In: Maisel LS and Berry JM (eds) *The Oxford Handbooks of American Politics*. Oxford: Oxford University Press, 425.

Schlozman KL (1984) What Accent the Heavenly Chorus? Political Equality and the American Pressure System. *The Journal of Politics* 46(4): pp. 1006-1032.

Schlozman KL and Tierney JT (1986) *Organized Interests and American Democracy*. New York: Harper & Row.

Schmitter PC (1974) Still the Century of Corporatism? *The Review of Politics* 36(01): 85.

Siaroff A (1999) Corporatism in 24 industrial democracies: Meaning and measurement. *European Journal of Political Research* 36(2): 175.

Truman DB (1951) *The Governmental Process: Political Interests and Public Opinion*. New York: Knopf.

Warren M (2001) *Democracy and Association*. Princeton and Oxford: Princeton University Press.

Wonka A, Baumgartner FR, Mahoney C and Berkhout J (2010) Measuring the size and scope of the EU interest group population. *European Union Politics* 11(3): 463-476.