



UvA-DARE (Digital Academic Repository)

Making Inference across Mobilization and Influence Research

Comparing Top-Down and Bottom-Up Mapping of Interest Systems

Berkhout, J.; Beyers, J.; Braun, C.; Hanegraaff, M.; Lowery, D.

DOI

[10.1177/0032321717702400](https://doi.org/10.1177/0032321717702400)

Publication date

2018

Document Version

Final published version

Published in

Political Studies

License

CC BY-NC

[Link to publication](#)

Citation for published version (APA):

Berkhout, J., Beyers, J., Braun, C., Hanegraaff, M., & Lowery, D. (2018). Making Inference across Mobilization and Influence Research: Comparing Top-Down and Bottom-Up Mapping of Interest Systems. *Political Studies*, 66(1), 43-62.
<https://doi.org/10.1177/0032321717702400>

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

Making Inference across Mobilisation and Influence Research: Comparing Top- Down and Bottom-Up Mapping of Interest Systems

Political Studies
2018, Vol. 66(1) 43–62
© The Author(s) 2017



Reprints and permissions:
sagepub.co.uk/journalsPermissions.nav
DOI: 10.1177/0032321717702400
journals.sagepub.com/home/psx



Joost Berkhout¹, Jan Beyers², Caelesta Braun³,
Marcel Hanegraaff¹ and David Lowery⁴

Abstract

Scholars of mobilisation and policy influence employ two quite different approaches to mapping interest group systems. Those interested in research questions on mobilisation typically rely on a bottom-up mapping strategy in order to characterise the total size and composition of interest group communities. Researchers with an interest in policy influence usually rely on a top-down strategy in which the mapping of politically active organisations depends on samples of specific policies. But some scholars also use top-down data gathered for other research questions on mobilisation (and vice versa). However, it is currently unclear how valid such large-N data for different types of research questions are. We illustrate our argument by addressing these questions using unique data sets drawn from the INTEREURO project on lobbying in the European Union and the European Union's Transparency Register. Our findings suggest that top-down and bottom-up mapping strategies lead to profoundly different maps of interest group communities.

Keywords

interest groups, interest group populations, lobbying, European Union

Accepted: 30 December 2016

For most of the history of scholarship on the politics of interest representation, research was largely confined to only a few interest organisations¹ or a limited set of policymaking areas. The reasons for this were a lack of data on larger communities of organisations and their

¹Department of Political Science, University of Amsterdam, Amsterdam, The Netherlands

²Department of Political Science, University of Antwerp, Antwerp, Belgium

³Faculty of Governance and Global Affairs, Leiden University, The Hague, The Netherlands

⁴Department of Political Science, Penn State University, University Park, PA, USA

Corresponding author:

Marcel Hanegraaff, Department of Political Science, University of Amsterdam, Nieuwe Achtergracht 166,
1018 WV Amsterdam, The Netherlands.

Email: m.c.hanegraaff@uva.nl

lobbying activities. Some notable scholarship was generated from this early empirical work, and much of this remains relevant to our understanding of interest group politics to this day (Witko, 2015). Still, following the strong advice of Baumgartner and Leech in their 1998 book, *Basic Interests*, the last two decades have seen a flowering of large-N research on interest groups (see reviews in Bunea and Baumgartner, 2014; Hojnacki et al., 2012). Especially in the last few years, we have seen a sharp increase of studies and many new initiatives to map entire interest group populations. This now includes projects in a wide range of countries, such as the United States (Baumgartner and Leech, 2001; Gray and Lowery, 1996), Germany (Klüver, 2015), Denmark (Binderkrantz et al., 2014), Sweden (Naurin and Boräng, 2012), Great Britain (Helboe Pedersen et al., 2015), Scotland (Halpin et al., 2012), Belgium (Fraussen et al., 2014), The Netherlands (Poppelaars, 2009), Spain (Chaqués-Bonafont and Muñoz Márquez, 2016), Switzerland (Gava et al., 2015), Italy (Lizzi and Pritoni, 2014), France (Berkhout, 2015), Australia (Fraussen and Halpin, 2016) and Canada (Johnson, 2013). Beyond these national populations, research endeavours have also extended their focus towards transnational interest group communities, such as the European Union (Berkhout and Lowery, 2011; Coen and Katsaitis, 2013; Greenwood and Dreger, 2013), and even at various international organisations (Hanegraaff, 2015).

Given the growth of studies mapping interest group populations in recent years, one important question arising from these research endeavours is to what extent these efforts lead to valid knowledge on the politics of interest representation. That is, these mapping strategies range between mapping concrete political activities associated with particular policies (a variation of what we term top-down mapping) and mapping interest organisations via lobby registration or census data and not specifically associated with a given policymaking trajectory (which we term ‘bottom-up mapping’). And some scholars routinely use these mapping strategies interchangeably to assess the political influence organised interests enjoy and varying mobilisation patterns (see below).

A specific example of this interchangeable use of these two types of data (top-down and bottom-up) concerns the demand-side hypothesis, namely that lobbying is largely a response to government activity. We see at least three types of data used to assess the veracity of the conjecture. First, early tests of this hypothesis were largely case-oriented; for instance, Heinz et al. (1993) examined the population of interest organisations *actively* lobbying on four policy cases. Second, Leech et al. (2005) tested the hypothesis by examining the relationship between the legislative agenda of the US Congress across a variety of topics and the total number of lobby organisations registered within different sectors related to those topics. Using similar general registers, Coen and Katsaitis (2013) and Broscheid and Coen (2007) relate the numbers of lobbyists showing interest in the policies of distinct Directorates-General (DGs) of the European Commission (EC) to the information ‘needs’ of the policymakers. Third, most removed from actually lobbying, Baumgartner and Shoub (2015) tested the same hypothesis with agenda data and the number of organisations listed in the *Encyclopedia of Associations*, a directory of organisations better suited to studying the precursors to mobilisation than lobbying per se (see also Jordan et al., 2012). Indeed, the vast majority of the organisations listed in such directories do not engage in any lobbying activity at all. Empirical tests of the demand hypothesis, then, employ a variety of measures of interest organisation populations.

Extracting conclusions about the mobilisation of organised interests from data on the explicit political activities of organised interests requires, however, that the diversity of interests active on a sample of ongoing policies map in an isomorphic manner on the diversity of the larger interest system. Or, vice versa, claims on political influence from

bottom-up maps of interest group systems may require imposing weights of political activity, since organisations identified through bottom-up sampling typically vary in the range and type of political activity. There have not been many attempts to link the different levels – bottom-up and top-down – of population data. Exceptions include Schlozman et al.'s (2015) linkage of organisations listed in the *Washington Representatives* directory to the employment of lobbyists and lobbying expenditures and Poppelaars' (2009) study on interest groups in the Netherlands which explicitly compared census data and policy activity data. Often, however, scholars employ the most readily available type of interest organisation and use these data to answer different types of questions.

However, how valid is such 'cross-domain' usage of large-N data for the politics of interest representation? Can data gathered on the diversity of interest organisations from a bottom-up mapping of entire interest group populations be validly employed to address research questions on how societal interests influence policy decisions? And do data gathered on the lobbying activities of organised interests on a sample of policies tell us something about overall patterns of mobilisation within political systems? These questions – raised forcefully by the essays in Halpin and Jordan's (2012) *The Scale of Interest Organization in Democratic Politics* – are important as they point to potential misdiagnoses of mobilisation processes and influence in studies of interest representation. For instance, a top-down mapping of an interest group community may identify mostly stakeholders that are heavily engaged in specific policies, but it does not necessarily lead to valid estimate of the extent to which particular societal segments were capable to overcome their collective action problem within a particular political system. Caelesta Poppelaars (2009: 222–223), for instance, shows that based on a top-down mapping strategy, one would draw optimistic conclusions about the mobilisation rates of non-governmental organisations (NGOs) in the Netherlands, as they constitute a large part of the top-down population. When turning to a bottom-up mapping strategy based on census data, the number of NGOs reduces to far more modest proportions, indeed indicating potential underestimation of their mobilisation capacity. The importance of these questions clearly extends beyond the field of interest representation. In most cases, mapping studies are designed to evaluate the openness, legitimacy and effectiveness of political systems. That is, they are intended to offer insights into the width and breadth of political participation and political biases apparently reflected in political decisions. Yet how we evaluate political participation and biases depends greatly on the nature of the data sources we use. Without a proper understanding of the potential biases associated with top-down and bottom-up mapping strategies, our understanding of the mechanisms of political participation and political bias might be equally biased.

We illustrate our argument through data drawn from three data sets mapping EU interest group populations. First, we rely on data produced by the INTEREURO project's analysis of lobbying in the EU (Beyers et al., 2014). Because this project maps the interest populations of a set of randomly selected legislative proposals, these data serve as the best available top-down map to date as it includes the entire set of politically active groups (N=1027) associated with an intermediate number of legislative proposals and as such exceeds small-N top-down analyses. We compare this top-down map with the most comprehensive bottom-up map available for the EU case: the Transparency Register (TR) (N=6873). These two sources are then complemented with a mapping strategy which falls in-between a top-down and bottom-up map, namely, the European Patent (EP) registration data (N=3453).

This article is structured as follows. We first outline the many reasons to suspect that varying mapping strategies should indeed generate quite different distributions of interest organisations. Then, we provide several examples of different mapping exercises in the EU whereby

we show the extent to which they generate different distributions. We conclude with an assessment on the use of different mapping exercises and suggestions for future research.

The Case for Incongruence in Mapping Strategies

Generally, scholars interested in mobilisation or influence have employed two quite different approaches to mapping interest group systems. Researchers interested in mobilisation are interested in who enters and leaves interest group communities, the processes which govern their density and diversity and their development over time. Answering such questions requires a census of interest groups across time and/or space. Thus, mobilisation scholars have typically relied on a *bottom-up* mapping strategy in order to identify the size and composition of entire interest group communities (Berkhout and Lowery, 2011; Gray and Lowery, 1996; Halpin and Jordan, 2012; Johnson, 2013). A bottom-up mapping covers the community of organisations of all organisational entities which are potentially politically active but are not necessarily engaged in actively seeking actual policy influence. Typical for this approach is that it does not take the policy agenda – for instance, ongoing legislative processes – as a starting point but proceeds from census or lobby registration data. An early example of such research is Gray and Lowery's (1996) analysis of US state lobbying registration rolls in *The Population Ecology of Interest Representation*. More recent examples include the use of the door pass data of the European Parliament or TR or other registers of interest organisations active in the EU (Greenwood and Dreger, 2013; Wonka et al., 2010).

In contrast, influence scholars are ultimately interested in how policy processes unfold, more precisely whether and how organised interests influence political outcomes. Addressing this question requires that we attend first to the actual policies policymakers produce. Accordingly, scholars of influence have typically relied on a *top-down* mapping strategy in which samples of interest organisations are drawn from those active on specific policies. Thus, we define top-down mapping as the identification of a community of interest organisations on the basis of the observation of political activities in relation to ongoing policy processes. For instance, a starting point for a mapping of a community of organised interests might be public consultation initiation by the EC in relation to particular policy proposals. Perhaps the earliest example of such research is Heinz et al.'s (1993; see also Knoke et al., 1996; Laumann and Knoke, 1987) analysis of the interest organisations active in some prominent policy cases (recent examples are Baumgartner et al., 2009; Beyers et al., 2014; Bunea, 2014, Mahoney, 2008).

Importantly, neither mapping strategy in the now burgeoning literature relying on large-N research is more valid in and of itself; rather, each is appropriate for its distinctive purpose of examining issues of mobilisation or influence (Beyers et al., 2014). However, interest representation scholarship is not neatly divided between those who study influence and those who study mobilisation. Researchers also routinely use data gathered to address issues of either mobilisation or influence to address questions about issues better associated with the other (Gray et al., 2013; Klüver, 2013). For example, in *Interest Groups and Health Care Reform Across the United States*, Virginia Gray et al. (2013) employ data on the diversity of interests on US state lobby registration rolls, initially gathered to study organisational mobilisation, to assess their influence on the adoption of three health policies, implicitly assuming that the diversity of total lobby registrations is isomorphic with the diversity of interests actually lobbying on the policies. Such use of bottom-up data designed to study relative mobilisation, data with little direct bearing of

actual lobbying for influence, is quite common in influence research (Smith, 2000; Toshkov et al., 2013). Similarly, but reversing the relationship between mobilisation and influence, Heike Klüver's (2013: 138–144) *Lobbying in the European Union* is largely devoted to the analysis of influence based on a sample of position papers interest groups submitted in response to consultations organised by the EC, and using the same data, it also addresses the broader issue of mobilisation and the diversity of the EU interest group system. With respect to the United States, Jeffrey Berry (1999) has also employed evidence on the lobbying activities of liberal interest organisations to make claims about their mobilisation advantages relative to business interest organisations. Christine Mahoney (2008) has similarly made a number of claims on variation in mobilisation rates by different types of interest organisations in both Europe and the United States based on her analysis of populations drawn from publicly available lobby registries.

So, it is not uncommon for data gathered via one mapping strategy and designed to test hypotheses about either mobilisation or influence to be used to say something about research questions more appropriately in the other field of research. There are several reasons why researchers primarily interested in mobilisation might be concerned about inferences on mobilisation made by scholars relying on data generated from top-down mappings which consider mostly politically active organisations (and vice versa).

First, and perhaps most importantly, a focus on policy decisions is beside the point from a mobilisation perspective given that organisations develop political activities or monitor the policy process for various reasons beyond actually seeking influence on specific policies. Indeed, establishing an interest group and joining an interest group community are often also about mobilising members or securing finance instead of policy influence per se (Hanegraaff et al., 2016; Lowery, 2007). Attending to these concerns may lead to little or no explicit effort to actually influence policy decisions, and organisations motivated by such concerns would be missed or at least underrepresented in samples drawn from those actively seeking influence on specific policy decisions.

Second, even when organised interests are primarily concerned about influencing public policy, the policy process is a long and winding one, running from efforts to get any kind of hearing to final and authoritative policy choices on concrete proposals. And importantly, most interest organisations fail to even get their preferred issues on the table (Baumgartner et al., 2009). Such organisations would be absent from samples generated using a top-down strategy since these are typically attentive to lobbying activity on issues which have already secured space on the policy agenda in the form of a concrete policy proposal. Thus, active proposals are likely a biased sample of all potential issues which are considered by policymakers. This, in turn, may generate a biased sample of interest organisations compared to all who might be seeking to influence policy outcomes at the very early stage of the policy process. Indeed, top-down mapping often assumes, if implicitly, that such activity is in response to the demand function generated by the introduction of a policy proposal (Leech et al., 2005). The inadequacy of this assumption is fully evident in EU lobbying where there is no clear pattern in the timing of the appearance of a specific policy proposal and lobbying activity by organised interests (Toshkov et al., 2013). Much lobbying – if often unsuccessful – occurs long before a specific proposal appears on the policy agenda, which suggests that maps of interest organisations drawn from lobbying activity on specific (and often important) policy proposals may miss a great deal of mobilised organisations.²

Third, lobbying involves much more than seeking a ‘yes’ or ‘no’ vote on some policy. Indeed, much lobbying is merely occasional policy monitoring or dipping into the policy

process only on an episodic basis as ‘lobby tourists’. Interest group communities are highly dynamic, with many organisations appearing only occasionally and then disappearing from the interest population (Anderson et al., 2004; Berkhout and Lowery, 2011). Moreover, EU policymaking outcomes are seldom characterised by clear winners (or losers) and mostly resemble complex compromises in which various interests get balanced (Mahoney, 2008). Research on group mobilisation in the EU shows that interest group communities tend to have a number of persistent members – the ‘old bulls’ – who are routinely represented. It would seem plausible that such ‘old bulls’ are overrepresented in samples generated from top-down mapping strategies, while the ‘tourists’ are underrepresented, as those are engaged in more passive and ad hoc forms of policy monitoring. Yet scholars of mobilisation, given their concerns about patterns of exit from and entry into interest group communities, are equally attentive to both the old bulls and the mayflies; each is equally relevant to assessing the degree to which interest group systems are open and unbiased. But a mapping based on influence activity at the final stage of the policy process may miss many of the latter.

Fourth, there is a long history of suspicion of bias in interest group systems which are often viewed as overrepresenting a few resourceful interests, typically business interests (Schattschneider, 1960; Schlozman et al., 2015). The diversity of interest group communities is, of course, a major topic of concern to mobilisation scholars. But there is also an implicit assumption that interest group systems may become even more biased at the final stages of policymaking processes. That is, contrary voices, through a process which might be labelled an iron law of influence concentration, may become increasingly less active, enjoy less access and have less influence as proposals move through the policy process and the scope of the conflict becomes more narrow. As already noted by Schattschneider (1960, 34), ‘scope and bias are aspects of the same tendency’, and the narrower the scope of conflict, the stronger the bias of the interests involved. From the perspective of mobilisation scholars, the potential of increasingly less access is especially problematic. If interest group systems become more concentrated and biased as a proposal moves through the policy process, then samples drawn via top-down mapping may not spot organised interests with a legitimate stake in a specific policy.

Fifth, bottom-up maps, based on lobby registration rolls or some other census of the entire lobbying community of the type employed by Berkhout (2010), Gray and Lowery (1996); Gray et al. (2013), Hanegraaff (2015), Halpin and Binderkrantz (2011), Halpin (2011), Mahoney (2008) and Poppelaars (2009), might identify organisations which are less relevant to influence scholars. If the focus is really on the influence of organised interests on final policy decisions, then those organisations lobbying for some other reason than securing influence – the ‘tourists’, those denied any real access to policymakers and those who fail to gain policy attention – are less relevant for analysing how concrete policy processes unfold. Thus, data derived from a bottom-up mapping strategy may identify many interest organisations which are either not seeking influence or prevented from doing so. This is not problematic as long as such studies aim to explain mobilisation patterns. However, inferences might be problematic when one uses this type of data for drawing inferences on policy influence (see examples above).

These arguments suggest three types of biases with respect to the inferences we draw from top-down or bottom-up data. First, bias would result because the activities of membership groups and civil society organisations are more heavily motivated by concerns of mobilisation (e.g. informing and involving members and seeking organisational resources) than are non-membership-based organisations such as the public affairs offices

of companies or the 'liaison offices' of subnational governments. Second, regarding differences within the community representing business interests, it also seems that large businesses and encompassing business associations would be more likely to maintain a constant presence in lobbying communities – and be part of the set of 'permanent residents' – than specialised business interests or representatives of smaller enterprises. Third, departing from a Schattschneiderian perspective in which 'pressure politics is a selective process ill designed to serve diffuse interests' (Schattschneider, 1960: 35), it follows that access to policymakers during the final decision stage is easier to obtain for business interests than for NGOs or other public interest groups; the former are more likely to be among the 'old bulls'. And if the policy views of some interest group types receive a more ready hearing and, thus, space on the policy agenda than those of others (Schlozman, 2012), then the distributions of organisations at the decision-making table may be substantially different from a bottom-up census of the group population. These are reasons to suspect that distributions generated from a bottom-up mapping of the interest group communities do not reflect the set of actors that are active at the final stage of the policy process.

But even if the distribution of interest organisations generated via a top-down mapping of active interest organisation faithfully mirrored those produced via a bottom-up census of interest organisations, there remains a more serious problem for influence research using a bottom-up census of interest organisations. This problem, if not perhaps an inherent one, lies in the nature of the data typically generated by the two research strategies. That is, because bottom-up research strategies typically attempt to map whole interest group communities, they are severely limited in assessing the amounts or kinds of activities organisations undertake beyond merely showing up somewhere in the policy process. To use such data to study influence, one basically assumes that all interest organisations do more or less the same thing once they are mobilised. In contrast, top-down research strategies, because they usually focus on a focused sample of policy issues, typically do much more than merely register presence or absence in the policy arena. They assess lobbying strategies and tactics, evaluate comments and statements used to frame choices and, among many other things, look at the frequency and locus of explicit lobby activity. Top-down research allows scholars to weigh interest organisations in terms of the intensity of their efforts to influence policies, something that cannot be done with a simple count of interest organisations. Therefore, it is doubtful that the bottom-up mapping of organised interests in mobilisation research could validly serve as a quick and ready substitute for a top-down mapping.

Data

These concerns indicate that cross-domain usage of different mapping strategies will result in invalid inferences on the mobilisation of organised interests if the distributions of different types of interest organisations vary significantly across the different mapping strategies. To illustrate the plausibility of these concerns, we compare the distributions of groups across different maps of interest populations within a single political system: the EU. Hereby, we rely on three mapping strategies which each have a different character: a bottom-up, a top-down and a map of the EU interest group population which has characteristics of both bottom-up and top-down approaches. By comparing these three mapping strategies, we aim to provide a comprehensive and nuanced picture of the options available to interest representation researchers and the consequences associated with the choice for each of these mapping sources. Our data were generated from three data sources: the INTEREURO project (Beyers et al. 2014), which employed a top-down

Table 1. Number of Interest Groups Identified in EC Expert Interviews, Media Sources and Interest Group Interviews.

	Number of legislative proposals	Number of groups identified
EC expert interviews	70	432
Media sources	125	436
IG interviews	78	264
Unique proposals/interest organisations	125	1027

EC: European Commission; IG: Interest Group.

The number of groups identified in each separate source does not add up to 1027 because some groups were identified in multiple sources.

mapping strategy based on a sample of legislative proposals; the door pass registration list of the European Parliament; and data derived from the TR which is, to date, the best available bottom-up source to map the European interest group population.

To construct our *top-down* mapping, we proceeded in several steps to link public policy decisions to interest organisations involved in the EU's legislative process (for an overview, see Table 1). The starting point for sampling legislative cases was a list of all proposals for generally binding EU law, that is, directives (N=144) and regulations (N=459), adopted by the EC between 1 January 2008 and 31 December 2010 (Beyers et al., 2014). We stratified the sample according to public salience, which increased the likelihood of sampling more salient cases, and we simultaneously made sure to include sufficient non-salient cases. We assessed salience on the basis of an analysis of the media coverage of all proposals in five sources, namely, *Agence Europe*, *European Voice*, the *Financial Times*, the *Frankfurter Allgemeine Zeitung* and *Le Monde*. This process resulted in a sample of 125 legislative proposals (Klüver et al., 2015).³

We subsequently conducted (1) a media analysis and (2) interviews with experts in the EC to construct the set of organised interests lobbying on each legislative proposal. The media analysis served to identify all stakeholders that made a statement about a specific proposal in the media sources. Next, for each of these 125 pieces of legislation, the responsible policy expert from the EC was identified and invited for an interview. Extensive interviews were carried out for 70 of the 125 legislative proposals (for 55 proposals, no significant lobbying activity was associated or we faced non-response). After the interviews with EC officials, we approached interest group representatives for the cases where we observed substantial lobbying and/or media coverage. We interviewed 143 interest group officials with respect to 78 policy cases. During all these interviews, experts were asked to list all relevant stakeholders that were actively involved in the specific legislative case. In this way, we identified 1027 unique interest groups as being active on one of the sampled legislative proposals.

The ideal *bottom-up* data source includes all mobilised organised interests in a given polity that have a (latent) interest in engaging in some ways with public policy. In conceptual terms, each organisation showing some activity in relation to the policy process ('a political interest') is defined as an interest organisation, including individual institutions such as firms (Beyers et al., 2008; Salisbury, 1994). An organisation enters the set of organised interests when it shows such an activity and remains within the set when it is less or no longer politically active. In the EU case, the TR (or 'Register of Interest Representatives') comes closest to such a bottom-up overview of policy-active groups. The register is

explicitly intended for all types of organisations showing some interest in the EU. Interest organisations have to provide extensive information about themselves (such as their membership) and their activities (such as their policy interests and how much they spend on lobbying). For some time now, as shown by Greenwood and Dreger (2013), the list has reached a level of coverage which makes it useful for academic purposes. However, it might be less reliable for a couple of variables that may substantially vary over a short period of time or are open to multiple interpretations, such as expenditures on lobbying and staff resources. We use this register while avoiding these disputed parts of the data. We rely on the 2015 version of the TR as the register only very recently reached a coverage such that it is suitable for academic purposes and thus allows for a comprehensive bottom-up map.⁴

We are aware of the time lag between our bottom-up and top-down samples, yet we prioritise the higher quality of the data in recent versions of the TR. Also, while there is at the level of individual organisations much volatility in interest group systems, we also know that at the aggregate level, the distribution of different types of groups is quite stable (see Berkhout and Lowery, 2011). This means that the time lag should not cause major inferential problems. To be sure, however, we cross-validated the results of one key variable in our analysis, that is, group type, with various other bottom-up data sources over time. The results confirm our observations. First, based on the CONECCS database in 2008, the predecessor of the TR, Wonka et al. (2010: 470) observe that 24% of the groups represent citizen interests. This comes very close to what we observe for the TR in 2015 (28%). Moreover, if we go back into the TR year by year (based on registration date), we find that over time the proportion of citizen groups slightly increases but always constitutes around or slightly above a quarter of the entire population: 2010, 24%; 2011, 25%; 2012, 25%; 2013, 27%; and 2014, 28%. These proportions are thus much in line with the proportion of citizen groups in our TR sample of 2015.

Similarly, with respect to our top-down mapping, we find considerable resemblance between our top-down coding during the 2008–2010 period and some more recent top-down data sources. For instance, the newly formed database by the EC on contacts of senior EC staff with interest groups lists 13% unique civil society groups, whereas business interests represent 70% of those who gained access to the EC (data made available by Transparency International based on self-reporting of senior EC staff; see <http://www.integritywatch.eu/>). This, again, comes very close to our top-down samples for the 2008–2010 period (14% citizen groups; 76% business).

Third, to further underpin our arguments, we include a population mapping which is less easy to classify as either top-down or bottom-up, namely, the EP registration data. This map falls in-between the top-down and bottom-up population. We characterise this source as in-between because the EP registration data have characteristics of a top-down sample in that it requires a concrete political act (requesting lobbying accreditation from the EP). Yet in some ways, it also shares characteristics of a bottom-up sample as organisations may register for all sorts of reasons (not necessarily only policy-related). In this respect, the EP data provide an aggregate overview of all lobbying activities engendered by the overall EP policy agenda, not just a selected sample of policy issues. The EP issued entry passes to persons and organisations who wish to enter the parliamentary premises and engage in activities ‘carried out with the objective of directly or indirectly influencing the formulation or implementation of policy and the decision-making processes of the EU institutions’ (EP rules, Annex IX(8)). The total number of unique interest groups identified during this procedure is 3453.

To examine the likelihood of inferential problems associated with the interchangeable use of bottom-up and top-down samples, we compare the distributions of interest organisations

Table 2. Congruence between Three Mapping Sources (Chi-Square), per Indicator (Type, Level and Region).

	Group type (df=4)	Level (df=3)	Region (df=3)
Top-down–in-between	$\chi^2 = 32.49^{***}$	$\chi^2 = 22.92^{***}$	$\chi^2 = 17.86^{***}$
Top-down–bottom-up	$\chi^2 = 110.93^{***}$	$\chi^2 = 182.62^{***}$	$\chi^2 = 22.19^{***}$
In-between–bottom-up	$\chi^2 = 231.03^{***}$	$\chi^2 = 557.88^{***}$	$\chi^2 = 23.76^{***}$

Significance: *0.1; **0.05; ***0.01.

while selecting only the same types of organisations across the data sets. These organisational types are all based on long-standing concerns in the literature on EU organised interests. First, we focus on the level of mobilisation by distinguishing between national organisations (which includes groups from subnational regions such as Catalonia or Bavaria), EU-level organisations and globally oriented organisations. The second variable is the type of member-state from which groups originate. In this article, we use an aggregate geographical variable, distinguishing between groups stemming from member-states located in Northwestern Europe, Southern Europe, Eastern Europe or non-EU countries. The third variable is group type where we distinguish citizen groups, professional associations, business associations, individual firms and research institutes. Citizen groups have a potentially broad membership and defend positions which go beyond the specific interest of their members or supporters, such as environmental protection or development aid. Professional associations represent the interests of particular professions, such as lawyers, medical doctors and artists. We also include (the very small number of) trade unions in this category. Business associations are groups that have either firms or organisations of firms as members. Research organisations are organisations that develop, spread and elucidate knowledge about societal, technical and political events yet do not necessarily represent a specific constituency. Many of them have a political affiliation and/or function as government- or corporate-sponsored think-tanks. Finally, we *exclude* in all sources ‘liaison offices’ of public organisations and institutions such as regional representations or public agencies (e.g. hospitals and regulatory agencies). The maps are coded with the same codebook based on publicly available information found online. The coding was conducted by Masters students under the supervision of a postdoctoral researcher. Intercoder reliability measures, based on Krippendorff’s alpha, range from 0.68 (level of mobilisation), to 0.81 (country of mobilisation), to 0.84 (organisation type) for a random sample of 100 observations from the data set.

Comparing Three Maps of EU Interest Representation

In the remainder of this article, we illustrate our argument by comparing the three maps of the EU interest group population across different indicators. We first test whether the overall distribution of group type, level of mobilisation and region of origin is significantly different across the three mapping strategies. In Table 2, we provide chi-square tests of different comparisons between individual mapping exercises. On each row, we compare different mapping strategies with respect to the three indicators mentioned above. In the top row, we compare the distributions of group type, level of mobilisation and region of origin between the bottom-up map (i.e. TR) and the in-between map (i.e. European Parliament). In the second row, we compare the distributions on these indicators between the in-between map and the top-down map (i.e. policy-centred mapping of organised

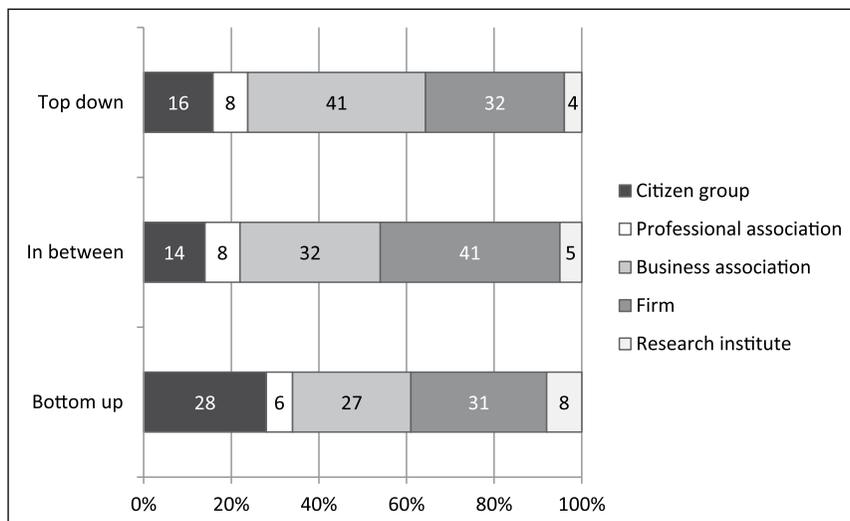


Figure 1. Distribution of Organisational Type, per Three Mapping Sources.

interests), and in the third row, we compare the distributions between the bottom-up map with the top-down map. The results show that for all three indicators, the top-down, the in-between and the bottom-up maps produce statistically significant different distributions. This confirms our expectation that the different mapping sources are indeed differently constructed because they generate different types of interest organisations.⁵ Hence, it validates our argument that without a proper understanding of the potential biases associated with top-down, in-between and bottom-up mapping strategies, our understanding of the mechanisms of political participation and/or influence might be equally biased.

The question now is what specific differences these different sources produce. For this, we specify the variation between the three approaches per indicator in the next sections. We start with group type (see Figure 1). As we expected, citizen groups are much more prominent in the bottom-up than in the top-down map and the EP register. In the TR, almost one-third of the organisations are citizen groups (30%), whereas this drops to 14% in the EP register and 16% in the top-down source. We find an almost opposite pattern for business groups. In the top-down map, no less than 73% are business organisations (i.e. 41% associations and 32% firms). At the EP, we find the exact same percentage of business groups (also 73%), yet differently divided between business associations (32%) and firms (41%). However, for the TR, this drops substantially to 58% (27% business associations and 31% firms). Professional organisations and research organisations are somewhat more evenly distributed, albeit the latter is somewhat more present in the TR (8% vs 4% for top-down and 5% for EP). All in all, this implies that if one focuses on the TR, one may underestimate the amount of lobbying activities of business organisations, while one is likely to overestimate the lobbying activities of citizen groups. Conversely, on the basis of the top-down policy-centred data, one might overestimate the mobilisation problems for citizen groups to become active in Europe as they are less visible in these sources, while one can easily underestimate the collective action problems that business groups face to become active in Europe when relying on this source.

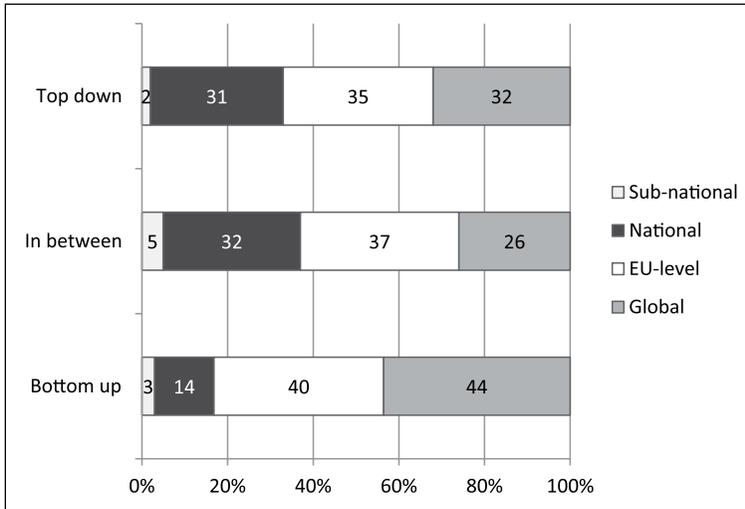


Figure 2. Distribution Level of Mobilisation, per Three Mapping Sources.

It is important to note that we do *not* argue that, given these findings, business groups are thus more influential in Europe. Interestingly, analyses of the top-down data show that although citizen groups are less actively seeking to influence specific policies compared to business (at least when looking at the number of organisations that lobby), business is not necessarily more influential than civil society and NGOs (Dür et al., 2015). What we argue is that the proportion of business groups increases the further one gets to the policy process. This is an important observation because there has been a long-standing, yet still implicit, assumption in the literature that interest group systems may become even more biased towards business groups at the final stages of policymaking processes (Dür and De Bièvre, 2007; Schattschneider, 1960; Schlozman et al., 2015). The different distributions of group types across the three maps suggest that this concern is indeed valid, at least for the EU. It is clear that citizen groups make up a relatively small part of the policy-related top-down population and the EP register compared to the broader TR. In contrast, business associations, firms and research institutions are prominently visible in the top-down mapping. This corresponds with the view that citizen groups, more often than business groups, are active in the EU for other reasons than to lobby, such as seeking donations, monitoring or networking. It is also in line with Kohler-Koch and Quitkatt's (2013) finding that the active outreach by the EC might not really help to remedy the lack of political presence of citizen groups in the EU. Our results show that many citizen groups still do not link their EU-level mobilisation with actively seeking to influence specific policies (Figure 2).

Going further, for the level of mobilisation (second set of rows in Table 2), we observe a larger proportion of domestic organisations in the top-down map and the EP register than in the bottom-up population which has larger proportions of supranational groups. In the TR, the number of national groups is 17% (3% subnational and 14% national) compared to 31% in the top-down map and 32% at the EP. In contrast, globally oriented organisations and EU-level organisations are much better represented in the TR. This indicates that multilateral-oriented organisations might monitor EU policy more than domestic groups, which are relatively more active in the lobbying processes which surround specific legislative cases. The consequence is that when the scope of issues become

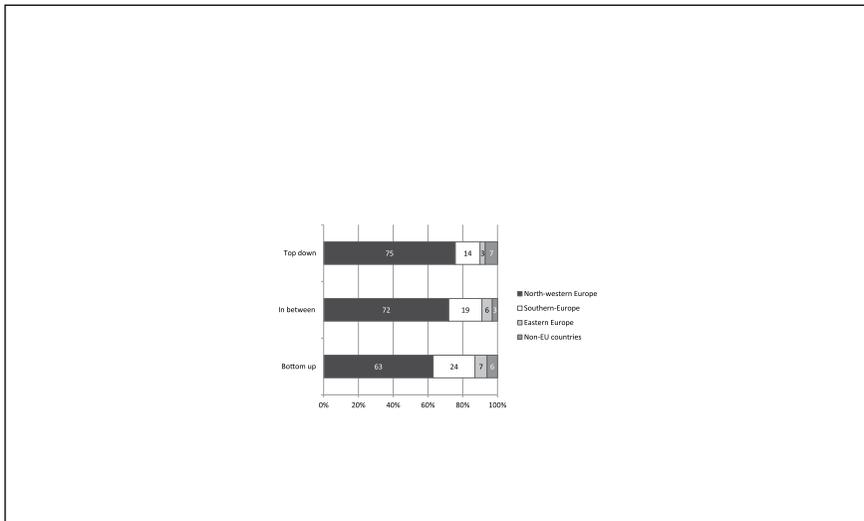


Figure 3. Distribution of Regions in Europe, per Three Mapping Sources.

smaller, as is the case in legislative decision-making, the interest community changes in its structure. In this case, a growing number of domestic interest organisations becomes involved when the policymaking process nears its final stage.

We further dissect the group of national organisations by country of origin (bottom rows in Table 2). The most notable observation (Figure 3) is that groups stemming from Northwestern Europe are generally much better represented than groups from Southern or Eastern Europe. This is most pronounced in the top-down sample and the EP register, and the share of groups from Northwestern Europe, with a 75% and 72% share, constitutes an important majority of all groups. Southern European interest groups are relatively numerous in their mobilisation (in the TR, this is 24%) but in the policy process less visible to policymakers and journalists than groups from other parts of Europe (15% in top-down and 19% in in-between sample). This means that a reliance on the TR will probably produce an invalid sample of the lobby activity of groups stemming from different regions. This could lead to an underestimation of the dominance of Northwestern European groups in the European lobby process or an overestimation regarding the lobby activities of groups from the south of Europe. In contrast, when one relies on a more top-down source, one runs the risk of relying on an imprecise sample to study the collective action problem of groups from different regions. From a more substantive perspective, these results provide yet another indication that the closer one gets to the policy process, the more biased the interest community becomes towards certain groups, in this case towards groups stemming from Northwestern European countries.

Conclusion

Mapping and analysing the nature of interest group populations is a growing field within the political science literature. Given the growing emergence of lobby registrations in many countries, combined with the technological improvements to code large-N databases, we observe an increase in the number of studies which systematically map interest

group populations (see references above). While we applaud these developments, we add a cautionary note to the cross-domain use of data sources. First, we note that there are two ideal types of mapping exercises possible: a top-down approach which maps interest groups engaged in political activity with respect to specific policy issues, and a bottom-up approach which maps organisations largely irrespective of the specific political activity of these organisations. We further argue that there are good theoretical reasons to suspect differences in the data generated by these mapping techniques and that using such empirical maps of interest populations for analysing both mobilisation and influence questions may generate cross-domain validation issues. Our empirical section provides an extensive example of these different mapping exercises and the variation on a number of core organisational characteristics between the organisations recorded in the data sources. The simultaneous assessment of such distinct kinds of data sources is challenging and commonly not possible due to lack of data or the absence of data sharing. While our data are certainly not perfect, we contend that they are a good test of our argument. That is, due to the wide variety of policies we analysed through the top-down mapping, the top-down population we present would be a most likely case to match the bottom-up mapping source. This would be entirely different for issue populations in studies in which only salient issues are selected or where only a few policy fields are studied. It is likely that the problems we identified in this article are thus at least identical to – and likely even more pronounced than – the challenges facing such studies (see the introduction). Hence, we urge future scholars to extend our research strategy and compare a broader range of top-down and bottom-up interest group populations, also in different political systems.

The main message is that bottom-up and top-down maps of interest representation do not automatically lend themselves to research questions speaking to the other mapping strategy. More to the point, top-down maps are limited in examining the density and diversity of *overall* interest populations. These approaches typically exclude certain parts of the population because they do not pass a given threshold of political activity, either because of a lack of political interest on the part of the organised interest or because of the closed nature of policy communities. In our data, this seems, for instance, the case for Southern European organised interests. At the same time, a bottom-up mapping strategy is not a perfect match for studies on interest group influence, as there is a long chain of intermediate steps between initial mobilisation and final policy outcomes (Lowery and Gray, 2004). The observation that business interests outnumber citizen interests does not necessarily tell us that business interest organisations affect policy outcomes to a stronger extent than other groups do. In the EU case, the relative presence of business interests is stronger in the top-down population than in the bottom-up one. Yet, as explicated elsewhere, such a strong presence of business groups does not necessarily imply more influence (see Dür et al., 2015). Comparing the different mapping strategies shows how the distribution varies across these different maps and, by inference, along the stages of the policy process. That in and by itself is crucial knowledge for any assessment of interest group politics as it contributes to, in particular, the external validation of knowledge with respect to interest mobilisation.

A major argument in favour of combining multiple sources in research projects on organised interests is that it allows for tentative observations regarding important questions of mobilisation bias and the selective access of interest organisations to policymakers. Despite the fact that each mapping strategy shows some potential biases, a simultaneous analysis of different data sources might be useful when one seeks to cross-validate inference on interest representation. That is, it might not be helpful to keep these

different types of data separate. Our findings suggest that using a top-down strategy for mobilisation research may lead to biased inferences as groups that are less politically active are much less likely to be identified. Yet such a conclusion can only be drawn if one compares a top-down mapping with some reliable bottom-up data source (and vice versa).

While not the direct objective of our article, this also means that our results allow us to reflect somewhat on the nature of the EU interest group system. The exact mechanisms by which uneven mobilisation translates into final political outcomes have been reason for much scholarly debate, already originating early in the past century. Most notably, Mancur Olson (1965) assumed that influence was a direct artefact of the mobilisation processes of individual interest groups. In contrast to Olsen, Schattschneider (1960) argued that as the scope of conflict would become narrower, bias would increase. Our findings seem to align more with Schattschneider's assertion indicating that, indeed, business groups are numerically more prominent in the policy process compared to in other arenas, as are domestically oriented groups and especially those from northwestern countries. Apparently, the closer one gets to the final stage of the policy process, the composition of interest group populations seem to change, favouring some interests over others. Yet what causes this outcome and to what extent institutional initiatives and reforms can effectively intervene in such processes remains a question for further research. It is a question which goes beyond the study of interest group politics and relates to key questions with respect to representative and participatory democracy.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship and/or publication of this article: The authors would like to acknowledge the financial support of the Netherlands Organisation for Scientific Research Project 461-10-519.

Notes

- 1 This article uses the terms 'interest group', 'interest organisation' and 'organised interest' interchangeably. These terms all point to the set of (1) organisations that (2) seek political influence yet (3) have no interest in gaining executive or legislative power themselves (Beyers et al., 2008).
- 2 Some top-down samples (like that generated by Baumgartner et al., 2009) are somewhat less subject to this problem given that they start with the proposals organisations are working on rather than sampling interest organisations from those working on important issues at the final stage of the policy process.
- 3 In total, 64 proposals are for directives and 61 proposals for regulations.
- 4 The alternative data source for a bottom-up map is the European Public Affairs Directory, used in a couple of other studies (Wonka et al., 2010). This database does not fully serve our purposes because it focuses on those with a permanent and relatively stable Brussels presence. It underreports lobby tourists and thus misses national associations and organisations that lobby – occasionally or regularly – in Brussels (Berkhout and Lowery, 2011).
- 5 Note further that we also performed a multinomial regression analysis, which confirms that the three mapping sources produce – controlled for organisation type, level of mobilisation and the territorial origin of an interest group – statistically different distributions (see Appendix Tables A1 and A2 for more information on design and results).

References

- Anderson J, Newmark A, Gray V, et al. (2004) Mayflies and Old Bulls: Demographic Volatility and Experience in State Interest Communities. *State Politics & Policy Quarterly* 4 (2): 140–160.
- Baumgartner F and Leech B (1998) *Basic Interests: The Importance of Groups in Politics and in Political Science*. Princeton, NJ: Princeton University Press.
- Baumgartner F and Leech B (2001) Interest Niches and Policy Bandwagons: Patterns of Interest Group Involvement in National Politics. *Journal of Politics* 63 (4): 1191–1213.

- Baumgartner F and Shoub K (2015) Population Dynamics and Representation. In: Halpin D and Jordan G (eds) *The Scale of Interest Organization in Democratic Politics: Data and Research Methods*. Basingstoke: Palgrave Macmillan, pp.203–224.
- Baumgartner F, Berry J, Hojnacki M, et al. (2009) *Lobbying and Policy Change*. Chicago, IL: University of Chicago Press.
- Berkhout J (2010) *Political Activities of Interest Organizations: Conflicting Interests, Converging Strategies*. Leiden: Mostert and van Onderen.
- Berkhout J (2015) Are dense interest groups domains also more diverse? Assessing the diversity of interests organizations in the United Kingdom, France, the Netherlands and Germany. *Paper presented at the Interest Group Populations in Comparative Perspective Workshop, Hamburg, May*.
- Berkhout J and Lowery D (2011) Short-Term Volatility in the EU Interest Community. *Journal of European Public Policy* 18 (1): 1–16.
- Berry JM (1999) *The New Liberalism*. Washington, DC: Brookings Institute.
- Beyers J, Duer A, Marshall D, et al. (2014) Policy-Centred Sampling in Interest Group Research: Lessons from the INTEREURO-Project. *Interest Groups & Advocacy* 3 (2): 160–173.
- Beyers J, Eising R and Maloney W (2008) Researching Interest Group Politics in Europe and Elsewhere: Much We Study, Little We Know? *West European Politics* 31 (6): 1103–1128.
- Binderkrantz A, Christiansen P and Pedersen H (2014) Interest Group Access to the Bureaucracy, Parliament, and the Media. *Governance* 28 (1): 95–112.
- Broscheid A and Coen D (2007) Lobbying Activity and Fora Creation in the EU: Empirically Exploring the Nature of the Policy Good. *Journal of European Public Policy* 14 (3): 346–365.
- Bunea A (2014) Explaining Interest Groups' Articulation of Policy Preferences in the European Commission's Open Consultations: An Analysis of the Environmental Policy Area. *Journal of Common Market Studies* 52 (6): 1224–1241.
- Bunea A and Baumgartner FR (2014) The State of the Discipline: Authorship, Research Designs, and Citation Patterns in Studies of EU Interest Groups and Lobbying. *Journal of European Public Policy* 21 (10): 1412–1434.
- Chaqués-Bonafont L and Muñoz Márquez LM (2016) Explaining interest group access to parliamentary committees. *West European Politics* 39: 1276–1298.
- Coen D and Katsaitis A (2013) Chameleon Pluralism in the EU: An Empirical Study of the European Commission Interest Group Density and Diversity across Policy Domains. *Journal of European Public Policy* 20 (8): 1104–1119.
- Dür A and De Bièvre D (2007) Inclusion without Influence? NGOs in European Trade Policy. *Journal of Public Policy* 27 (1): 79–101.
- Dür A, Bernhagen P and Marshall D (2015) Interest Group Success in the European Union: When (and Why) Does Business Lose? *Comparative Political Studies* 48 (8): 951–983.
- Fraussen B and Halpin D (2016) Assessing the Composition and Diversity of the Australian Interest Group System. *Australian Journal of Public Administration* 75: 476–491.
- Fraussen B, Beyers J and Donas T (2014) The Expanding Core and Varying Degrees of Insiderism: Institutionalised Interest Group Access to Advisory Councils. *Political Studies* 63 (3): 569–588.
- Gava R, Varone F, Mach A, et al. (2015) Interests Groups in Parliament: Exploring MPs' Interest Affiliations (2000–2011). *Paper presented at the Comparative Agendas Project Conference, Lisbon, 17 June*.
- Gray V and Lowery D (1996) *The Population Ecology of Interest Representation: Lobbying Communities in the American States*. Ann Arbor, MI: University of Michigan Press.
- Gray V, Lowery D and Benz J (2013) *Organized Interests and Health Policy in the American States*. Washington, DC: Georgetown University Press.
- Greenwood J and Dreger J (2013) The Transparency Register: A European Vanguard of Strong Lobby Regulation Quest. *Interest Groups & Advocacy* 2 (2): 139–162.
- Halpin D (2011) Explaining Policy Bandwagons: Organized Interest Mobilization and Cascades of Attention. *Governance* 24 (2): 205–230.
- Halpin D and Binderkrantz A (2011) Explaining Breadth of Policy Engagement: Patterns of Interest Group Mobilization in Public Policy. *Journal of European Public Policy* 8 (2): 201–219.
- Halpin D and Jordan G (2012) *The Scale of Interest Organization in Democratic Politics: Data and Research Methods*. New York: Palgrave Macmillan.
- Halpin D, Baxter G and MacLeod I (2012) Multiple Arenas, Multiple Populations: Counting Organized Interests in Scottish Public Policy. In: Halpin D and Jordan G (eds) *The Scale of Interest Organization in Democratic Politics: Data and Research Methods*. Basingstoke: Palgrave Macmillan, pp.118–140.

- Hanegraaff M (2015) Transnational Advocacy over Time: Business and NGO Mobilization at UN Climate Summits. *Global Environmental Politics* 15 (1): 83–104.
- Hanegraaff M, Beyers J and De Bruycker I (2016) Balancing Inside and Outside Lobbying: The Political Strategies of Lobbyists at Global Diplomatic Conferences. *European Journal of Political Research* 55: 568–588.
- Heinz JP, Laumann E, Robert L, et al. (1993) *The Hollow Core*. Cambridge, MA: Harvard University Press.
- Helboe Pedersen H, Halpin D and Rasmussen A (2015) Who gives evidence to parliamentary committees? A comparative investigation of parliamentary committees and their constituencies. *Journal of Legislative Studies* 21 (3): 408–427.
- Hojnacki M, Kimball D, Baumgartner F, et al. (2012) Studying Organizational Advocacy and Influence: Reexamining Interest Group Research. *Annual Review of Political Science* 15: 379–399.
- Johnson EW (2013) Toward International Comparative Research on Associational Activity: Variation in the Form and Focus Voluntary Associations in Four Nations. *Nonprofit and Voluntary Sector Quarterly* 43 (2): 163–181.
- Jordan G, Baumgartner F, McCarthy J, et al. (2012) Tracking Interest Group Populations in the US and the UK. In: Halpin D and Jordan G (eds) *The Scale of Interest Organization in Democratic Politics: Data and Research Methods*. Basingstoke: Palgrave Macmillan, pp.141–160.
- Klüver H (2013) *Lobbying in the European Union: Interest Groups, Lobbying Coalitions and Policy Change*. Oxford: Oxford University Press.
- Klüver H (2015) Interest Groups in the German Bundestag: Exploring the Issue Linkage between Citizens and Interest Groups. *German Politics* 24 (2): 137–153.
- Klüver H, Braun C and Beyers J (2015) Legislative Lobbying in Context: Towards a Conceptual Framework of Interest Group Lobbying in the European Union. *Journal of European Public Policy* 22 (4): 447–461.
- Knoke D, Pappi FU, Broadbent J, et al. (1996) *Comparing Policy Networks: Labor Politics in the U.S., Germany, and Japan*. Cambridge: Cambridge University Press.
- Kohler-Koch B and Quittkat C (2013) *De-Mystification of Participatory Democracy: EU-Governance and Civil Society*. Oxford: Oxford University Press.
- Laumann EO and Knoke D (1987) *The Organizational State: Social Choice in National Policy Domains*. Madison, WI: University of Wisconsin Press.
- Leech B, Baumgartner F, La Pira T, et al. (2005) Drawing Lobbyists to Washington: Government Activity and the Demand for Advocacy. *Journal of Politics* 58 (1): 19–30.
- Lizzi R and Pritoni A (2014) Interest Group System and Media System in Italy: Investigating the National Press (1992–2013). *Comunicazione Politica* 14 (2): 287–312.
- Lowery D (2007) Why Do Organized Interests Lobby? A Multi-Goal, Multi-Context Theory of Lobbying. *Polity* 39 (1): 29–54.
- Lowery D and Gray V (2004) A Neopluralist Perspective on Research on Organized Interests. *Political Research Quarterly* 57 (1): 164–175.
- Mahoney C (2008) *Brussels versus the Beltway: Advocacy in the United State and the European Union*. Washington, DC: Georgetown University Press.
- Naurin D and Boräng F (2012) ‘Who Are the Lobbyists? A Population Study of Interest Groups in Sweden. *Statsvetenskaplig tidskrift* 114 (1): 95–102.
- Olson M (1965) *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge, MA: Harvard University Press.
- Poppelaars C (2009) Corporatism or Lobbyism behind Dutch Dikes? Interest Representation in the Netherlands. In: McGrath C (ed.) *Interest groups and Lobbying, Volume Two: Europe*. Lewiston, NY: The Edwin Mellen Press, pp.207–225.
- Salisbury RH (1994) Interest Structures and Policy Domains: A Focus for Research. In: Crotty WJ, Schwartz MA and Green JC (eds) *Representing Interests and Interest Group Registration*. Washington, DC: University Press of America, pp.12–20.
- Schattschneider EE (1960) *The Semisovereign People*. New York: Holt, Rinehart and Winston.
- Schlozman KL (2012) Counting the Voices in the Heavenly Chorus: Pressure Participants in Washington Politics. In: *The Scale of Interest Organization in Democratic Politics*. Basingstoke: Palgrave Macmillan, pp.23–43.
- Schlozman KL, Jones PE, You HY, et al. (2015) Louder Chorus – Same Accent: The Representation of Interests in Pressure Politics, 1981–2011. In: Lowery D, Halpin D and Gray V (eds) *The Organizational Ecology of Interest Communities Reconsidered*. Basingstoke: Palgrave Macmillan, pp.157–182.
- Smith MA (2000) *American Business and Political Power: Public Opinion, Elections and Democracy*. Chicago, IL: University of Chicago Press.

- Toshkov D, Lowery D, Carroll B, et al. (2013) Timing is Everything? Organized Interests and the Timing of Legislative Activity. *Interest Groups & Advocacy* 2 (1): 48–70.
- Witko C (2015) Case Study Approaches to Studying Organization Survival and Adaptation. In: Lowery D, Halpin D and Gray V (eds) *The Organizational Ecology of Interest Communities Reconsidered*. Basingstoke: Palgrave Macmillan, pp.117–136.
- Wonka A, Baumgartner F, Mahoney C, et al. (2010) Measuring the Size and Scope of the European Union Interest Group Population. *European Union Politics* 11 (3): 463–476.

Author Biographies

Joost Berkhout is an Assistant Professor of Political Science at the University of Amsterdam. His main research interest lies in the field of interest group politics. He currently conducts research on the differences in the numbers and types of interest groups per sector and per country.

Jan Beyers is Full Professor of Political Science at the University of Antwerp (Department of Political Science) and Francqui Research Professor. His research and teaching cover institutional theories, comparative and international politics, European Union politics, interest groups and research methods. His current research projects are funded by the Research Foundation-Flanders, the European Science Foundation and the European Research Council. More details are available at www.janbeyers.eu.

Caelesta Braun is an Associate Professor in Political Science at the University of Leiden. Her main fields of research include interest representation and regulatory governance, with a focus on the political behaviour of organised interests, stakeholder management of regulatory authorities and decision-making.

Marcel Hanegraaff is an Assistant Professor in Political Science at the University of Amsterdam. He researches and teaches the politics of interest representation in a transnational and EU context, as well as on the functioning of international organisations in the fields of climate change and global trade.

David Lowery is the Bruce R. Miller and Dean D. LaVigne Professor of Political Science at Pennsylvania State University. He teaches and conducts research on the politics of interest representation, subnational politics and bureaucratic politics, and he has authored a number of papers on these and other topics. His latest book is *The Organization Ecology of Interest Communities* (Palgrave, 2015).

Appendix I

Note on multinomial analyses

To test whether the descriptive results are also statistically significant, we conducted a multinomial regression analysis. For this purpose, we rearranged the data set creating three entries for each interest group and one categorical indicator assessing the origin of the entries, being (1) top-down, (2) bottom-up or (3) in-between. The multinomial regression analysis predicts whether certain organisational types are more often present in either one of the mapping sources compared to the others. We ran separate analyses for (1) all organisations and (2) only domestic organisations; the latter is required to test the region of origin. Table A1 provides the results of all organisations. We ran two analyses in which the first takes the bottom-up mapping as the reference category and the second has the in-between map as the reference category. Table A2 displays the outcomes for the national organisations only. Again, one model uses the bottom-up map as the reference category, whereas the other version of the same model has the in-between map as the reference category. Basically, the results confirm the descriptive analyses reported in this article. First, citizen groups are much less visible in the top-down maps compared to the bottom-up. Second, EU-level and non-EU groups are more likely to show up in the bottom-up compared to other data sources. Finally, national groups that hail from Northwestern Europe show a higher prevalence in the top-down and in-between sources.

Table A1. Multinomial Regression of Top-Down, In-Between and Bottom-Up for All Organisations.

	Bottom-up (Ref.)		In-between		In-between (Ref.)	
	Top-down	In-between	Bottom-up	Top-down	Bottom-up	Top-down
Intercept	-1.981*** (0.115)	-0.853*** (0.076)	0.853*** (0.076)			-1.127*** (0.126)
Group type						
Citizen group	Ref.	Ref.	Ref.		Ref.	Ref.
Professional	0.586*** (0.173)	0.830*** (0.110)	-0.830*** (0.110)		-0.830*** (0.110)	-0.244 (0.188)
Association	0.817*** (0.113)	0.708*** (0.075)	-0.708*** (0.075)		-0.708*** (0.075)	-0.108 (0.127)
Firm	0.966*** (0.110)	0.982*** (0.072)	-0.982*** (0.072)		-0.982*** (0.072)	-0.016 (0.123)
Research institute	-0.144 (0.205)	0.146 (0.120)	-0.146 (0.120)		-0.146 (0.120)	-0.291 (0.226)
Level of mobilisation						
National	Ref.	Ref.	Ref.		Ref.	Ref.
Subnational	-1.610*** (0.318)	-1.449*** (0.182)	1.449*** (0.182)		1.449*** (0.182)	-0.161 (0.349)
EU level	-0.954*** (0.098)	-0.890*** (0.064)	0.890*** (0.064)		0.890*** (0.064)	-0.064 (0.102)
Non-EU	-0.827*** (0.093)	-1.350*** (0.067)	1.350*** (0.067)		1.350*** (0.067)	0.523*** (0.123)
Diagnostics						
LL	-7692.23					
LR χ^2	802.62					
Probability > χ^2	0.000					
N	10,002					

LR: likelihood ratio; LL: log likelihood; EU: European Union.

Significance: *0.1; **0.05; ***0.01.

Table A2. Multinomial Regression of Top-Down, In-Between and Bottom-Up for Domestic Organisations Only.

	Bottom-up (Ref.)		In-between (Ref.)	
	Top-down	In-between	Bottom-up	Top-down
Intercept	-2.120*** (0.211)	-1.131*** (0.140)	1.131*** (0.140)	-1.978*** (0.337)
Group type				
Citizen group	Ref.	Ref.	Ref.	Ref.
Professional	0.785** (0.563)	1.430*** (0.265)	-1.430*** (0.265)	-0.644* (0.355)
Association	0.957*** (0.239)	0.917*** (0.208)	-0.917*** (0.208)	-0.039 (0.262)
Firm	1.144*** (0.255)	1.246*** (0.220)	-1.246*** (0.220)	-0.102 (0.275)
Research institute	0.232 (0.355)	0.252 (0.236)	-0.252 (0.236)	-0.019 (0.392)
Region of origin				
Northwestern	Ref.	Ref.	Ref.	Ref.
Southern Europe	-0.823*** (0.275)	-0.675*** (0.125)	0.675*** (0.125)	-0.148 (0.208)
Eastern Europe	-1.125*** (0.381)	-0.878*** (0.266)	0.878*** (0.266)	-0.247 (0.409)
Non-EU countries	0.074 (0.303)	-1.113*** (0.264)	1.113*** (0.264)	-1.038*** (0.357)
Diagnostics				
LL	-1887.87			
LR χ^2	136.36			
Probability > χ^2	0.000			
N	2068			

LR: likelihood ratio; LL: log likelihood; EU: European Union.

Significance: *0.1; **0.05; ***0.01.