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Lobbying in coalitions: Interest group influence on European Union policy-making

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Abstract

The question of who wins and who loses lies at the heart of any analysis of policy-making and it should be of particular concern to scholars of European politics since the European Union constitutes a promising political opportunity structure for organized interests. Only few have however studied it and the small number of existing studies is characterized by a multitude of hypotheses and somewhat contradictory findings. This paper aims to overcome the shortcomings of the literature by presenting a new theoretical exchange model that identifies information supply, citizen support and market power of lobbying coalitions as the major determinants of interest group influence on policy formulation in the European Union. These hypotheses are empirically evaluated based on a large new dataset: Combining a quantitative text analysis of interest group submissions to Commission consultations with an online survey among interest groups, the theoretical expectations are tested across a large number of policy issues and interest groups while controlling for characteristics of individual interest groups and policy issues. The empirical analysis confirms the theoretical expectations indicating that lobbying is a collective enterprise in which information supply, citizen support and market power of entire lobbying coalitions account for variation in interest group influence.

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1 Introduction

The question of who wins and who loses lies at the heart of the study of politics. Understanding why some interest groups win and others lose should be of particular concern to scholars of European politics since the European Union (EU) constitutes a promising political opportunity structure for organized interests: The multiple layers of government together with the high fragmentation of the European institutions provide a plurality of access points to the decision-making process. These institutional provisions facilitating interest group access have been supplemented by an increasing openness of the European institutions towards interest groups. Due to the constant criticism of the democratic deficit, the European Commission has taken various initiatives to increase the participation of interest groups such as the White Paper on Governance or the Transparency Initiative (Kohler-Koch and Finke, 2007). Even though the Commission initiatives have provided broad access to a wide variety of interest groups, recent empirical evidence shows that the ability to exploit this access varies considerably across groups (Dür and de Bièvre, 2007*a*; Persson, 2007). How can this be explained? Why are some interest groups able to influence policy-making in the European Union while others are not?

Many hypotheses exist that stress potential determinants of interest group influence on policy-making (for reviews, see Dür and de Bièvre, 2007b; Dür, 2008a). However, only very few scholars have empirically dealt with interest group influence due to methodological difficulties in measuring influence so that empirical tests of these hypotheses are scarce (see also Dür and de Bièvre, 2007b; Dür, 2008b,a). The hypotheses can be classified into two broad categories: Interest group properties and issue-specific factors.¹ In terms of interest group properties, several explanatory factors have been suggested such as type of interest, resources or information supply. A prominent hypothesis is that interest groups which defend diffuse interests are less successful in influencing policy-making than interest groups representing concentrated interests. However, the empirical findings concerning this hypothesis are contradictory: Whereas Dür and de Bièvre (2007a) and Schneider and Baltz (2003) confirm the hypothesis that diffuse interests are less influential than concentrated interests, other authors contend that diffuse interests were in fact capable of exerting a considerable amount of influence on European policy-making (e.g. Pollack, 1997c; Warleigh, 2000). The same is true for the resource hypothesis: Whereas Eising (2007) and Klüver (2010a) demonstrated that resource endowment has a positive effect

¹Dür and de Bièvre (2007*a*) and Dür (2008*a*) also classify institutional features as a third group of explanatory variables. However, when solely examining interest group influence in one particular political system, the institutional context alone cannot account for variation in interest group influence since it is held constant and all interest groups face the same institutions.

on interest group access to European institutions, Mahoney (2007, 2008) and Baumgartner et al. (2009) did not find any clear relationship between resources and lobbying success. The importance of information supply for interest group influence has also been discussed extensively in the literature (e.g. Austen-Smith, 1993; Bouwen, 2004; Bernhagen and Bräuninger, 2005), but large empirical studies that systematically test the effect of information supply on interest group influence are still lacking.

In recent years, scholars have furthermore pointed out the importance of issue-related factors for interest group influence (Dür and de Bièvre, 2007*b*; Dür, 2008*a*; Mahoney, 2007, 2008; Baumgartner et al., 2009; Klüver, 2010*b*). Several explanatory variables have been suggested such as salience, conflictuality and complexity. Studies that empirically test these hypotheses are however scarce (for an exception, see Mahoney, 2007, 2008). A recent American study has moreover identified the characteristics of lobbying coalitions as an important issue-related variable affecting interest group influence (Baumgartner et al., 2009). Lobbying coalitions are defined as sets of actors who share the same policy goal (Baumgartner et al., 2009, 6). Baumgartner et al. (2009) demonstrated that not only characteristics of individual interest groups, but also characteristics of lobbying coalitions have to be taken into account to understand interest group influence in the United States. Up until now, there are however no studies that examine the importance of lobbying coalitions for interest group influence in other political systems including the European Union.

In conclusion, whereas each of the cited studies has great merits in pointing out possible determinants of interest group influence in the European Union, a multitude of usually unconnected hypotheses has been suggested and empirical evidence is still scarce. This article therefore aims at solving the presented puzzle by explaining why some interest groups are able to influence policy-making in the European Union while others are not. It provides two major contributions to interest group research: First, I systematically combine explanatory factors that have been suggested previously, but that have so far been treated in isolation from each other, to a coherent theoretical model of interest group influence in the European Union. More specifically, I develop a theoretical exchange model that identifies information supply, citizen support and market power of lobbying coalitions as the main determinants of interest group influence. Second, using a new measurement approach to interest group influence, this article tests these theoretical expectations across a wide variety of policy issues and interest groups based on a large new dataset that I constructed. I present a unique and unprecedented empirical analysis of interest group influence on policy-making in the European Union which allows me to draw general conclusions concerning the determinants of interest group influence on European policy-making.

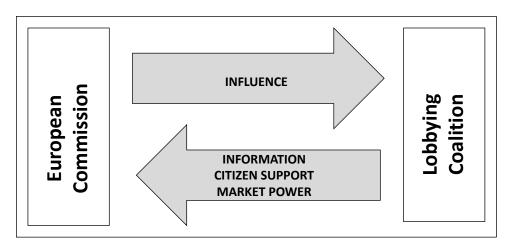
This study focuses on one particular stage of the policy-making process, the policy formulation stage. During this stage, the European Commission develops its legislative proposal which is then passed on to the Council and the European Parliament (EP). The European Commission has the sole right of initiative in the first pillar so legislative policy-making in this pillar always starts with a proposal of the Commission. The discussion between the Council and the European Parliament can therefore only take place based on a preliminary legislative framework that was designed by the Commission and it is therefore more difficult for the other institutions to amend than to accept its proposal. Accordingly, a former Secretary General of the European Commission commented that "for interest groups in particular, the proposal stage often offers the most fertile opportunities for exerting influence" (Thomson and Hosli, 2006, 15). Bouwen (2009, 25) reasons in a similar vein: "It is common knowledge among lobbyists that as long as no formal written documents are produced during the policy development stage, changes to the policy proposals can be made much more swiftly and easily".

The article proceeds as follows: I first present the theoretical model from which I derive hypotheses concerning the determinants of interest group influence. I then illustrate the research design of this study before empirically testing the theoretical expectations. The article concludes with a summary of the results.

2 The exchange of goods between the European Commission and lobbying coalitions

In this section, I develop a theoretical exchange model that explains why some interest groups are able to influence policy formulation in the European Union while others are not. The starting point are theoretical assumptions about the logic of action and the objectives of interest groups and the European Commission. I then derive propositions about the goods that are exchanged between interest groups and the European Commission. I expect that interest groups demand influence whereas the European Commission demands policy-relevant information, citizen support and market power. The ability of interest groups to influence policy formulation is hypothesized to vary with the capacity to provide these goods to the European Commission. Since lobbying is however a collective enterprise, I argue that information supply, citizen support and market power have to be taken into account at the lobbying coalition level rather than at the individual interest group level. Figure 1 illustrates the exchange model.

Figure 1: Theoretical exchange model



2.1 Objectives of interest groups and the European Commission

Interest groups are all societal actors who have a political interest, who are organized and who do not strive for public office (Beyers, Eising and Maloney, 2008, 106-107). Drawing on rational choice theory, I assume that interest groups are rational, goal-oriented and purposeful (collective) actors that follow a fixed set of ordered goals (Downs, 1957). I distinguish four types of objectives (Woll, 2008, 33-35): "Basic interests" are the general or universal interests of organizations. "Role-specific interests" apply the basic interest to the specific situation of the actor in question. "Means preferences" are strategies organizations can employ in order to achieve their role-specific and ultimately their basic interests. "Policy preferences" finally constitute the policy positions interest groups adopt concerning concrete policy issues that accommodate their role-specific interests.

Table 1: Objectives of interest groups and the European Commission

Type of objective	Associations	Companies	European Commission
1. Basic interest	Survival	Survival	Survival
2. Role-specific interest	Member acquisition	Maximizing profitability	Presenting successful proposals
3. Means preference	 Gaining influence Provision of services 	 Gaining influence Customer acquisition Reducing costs 	 Gathering information Obtaining legitimacy Gaining support of politically important actors
4. Policy preference	Policy position on policy initiative	Policy position on policy initiative	Policy position on policy initiative

The basic interest of interest groups is survival (e.g. Gray and Lowery, 1996; Lowery, 2007). All other goals of interest groups are secondary since survival is the precondition

for achieving any of the other objectives. Survival is the basic interest of associations and companies which are both subsumed under the term "interest groups". The key difference between associations and companies is membership. Whereas associations are membership organizations that have individuals, companies, public institutions or other associations as members, companies are corporate actors that do not have any members. Associations and companies therefore have different internal structures and different functions so that the pathway to survival is different (see table 1).

Associations are competing for members to extract from them adequate resources to ensure their survival (McCarthy and Zald, 1977). The role-specific interest of associations is therefore the acquisition and maintenance of members. Members join associations so that they influence legislators in their interest and due to special services they provide to their members (Olson, 1965).² The satisfaction of these demands is important for keeping a large member basis and thereby ensuring the flow of resources and ultimately the survival of associations. Accordingly, the means preferences of associations are maximizing their influence on the political decision-making process and the provision of services to their members. The role-specific interest of companies is to maximize profitability in order to ensure their survival (Knoke and Prensky, 1984, 4-6). The profitability of companies depends on three factors: The acquisition of customers, the costs of providing goods and services and their influence on legislation which is analytically most important for the purpose of this study. Since the profitability of companies is strongly affected by the political environment, companies attempt to maximize their profitability by influencing political decisions to their advantage (Coen, 1997; Woll, 2008). An important means preference of companies is therefore influencing policy-making in order to generate a more favorable environment for their business. In conclusion, maximizing political influence is an important strategy for associations as well as companies. Accordingly, the following proposition can be derived:

PROPOSITION 1: Interest groups demand influence from the European Commission.

Drawing on rational choice theory, I assume that also the European Commission is a rational, goal-oriented and purposeful (collective) actor who follows a fixed set of ordered goals (Downs, 1957). I assume that its basic interest is survival, that is retaining its competences that were delegated by member states (Majone, 1996*a*, 73). Member states have delegated oversight, policy implementation and agenda-setting competences to the European Commission in order to reduce the transaction costs of EU policy-making and to credibly commit themselves to their agreements (Moravcsik, 1998; Pollack, 2003).

 $^{^{2}}$ Olson (1965) specified coercion as a third reason for joining associations. However, coercion usually only applies to chambers which only constitute 1.7 per cent of all interest groups on the European level and coercion can therefore be neglected (Wonka et al., 2010).

In terms of agenda-setting which is analytically most important for the goal of this study, the Commission has the sole right of legislative initiative so that the legislative process always starts with a policy proposal from the Commission.³ Due to the problem of agency-shirking, member states have however installed several oversight mechanisms to control the Commission's behavior, such as the appointment process of Commissioners or the comitology procedure (Pollack, 1997*b*, 2003). The monopoly of legislative initiative of the European Commission is restricted by the requirement that the Council and under Codecision also the EP have to give their consent to its policy proposals.

In order to avoid that member states cut its competences and therefore threaten its survival, the European Commission has to successfully carry out the functions delegated by the member states. In terms of agenda-setting the European Commission therefore aims to present policy proposals that successfully pass the legislative process (Tallberg, 2002, 34). However, its ability to initiate legislation is limited by the requirement that the Council and under Codecision also the EP have to give their consent to every proposal before it can enter into force. I argue that the European Commission can draw on three major strategies to gain the approval of the Council and the EP: It can gather policy-relevant information to gain an informational advantage over member states, it can enhance the legitimacy of policy proposals by gathering citizen support and it can rally the support of actors who are politically relevant to member states and Members of the European Parliament (MEPs) (see table 2). Whether interest groups can influence policy formulation depends on their ability to support the European Commission in pursuing these strategies. The ensuing section therefore illustrates these three strategies in more detail.

Strategy	Gathering information	Obtaining legitimacy	Gaining support of politically relevant actors
Exchange good	Information	Citizen support	Citizen support Market power
Mechanism	Informational advantage	Shaming	Electoral pressure

Table 2: Commission strategies and exchange goods

2.1.1 The Commission's need for information

In order to introduce policy proposals that successfully pass the legislative process, the European Commission requires information (Austen-Smith, 1993; Bouwen, 2004;

 $^{^{3}}$ This applies to the first pillar of the European Union which is arguably the most important and therefore the focus of this study.

Crombez, 2002; Broscheid and Coen, 2003; Bernhagen and Bräuninger, 2005). However, despite the increasing competences of the European Union and the high complexity of European policy-making, the European Commission is notoriously understaffed with a staff size that merely corresponds to the size of a larger city administration (Bouwen, 2009, 20). In order to gather policy-relevant information, the European Commission therefore widely consults among interest groups (Majone 1996*a*, 72-74; Bouwen 2009, 22). Thus, the Commission demands information from private actors and by supplying this information, interest groups are able to influence the content of the policy proposal. Accordingly, Austen-Smith (1993, 799f) points out: "Decision-makers are frequently choosing policies without complete information on their consequences, in which case, information becomes valuable, and those who possess it are accordingly in a position to influence policy". I argue that the European Commission demands two different types of information in order to develop "winning" policy proposals (see also Broscheid and Coen, 2003; Hall and Deardorff, 2006): Policy expertise and information on the preferences of major stakeholders.

Every policy initiative starts with a policy problem defined as a need for regulation. In order to be able to develop a policy proposal that closes the regulatory gap, the Commission requires technical expertise to provide an appropriate solution to the policy problem (Pappi and Henning, 1999; Bouwen, 2004). Since the European Commission is highly understaffed and deals with multiple issues at the same time, it strongly depends on expertise provided by external actors (Mazey and Richardson, 1992; Saurugger, 2002). Interest groups by contrast are specialists that are only concerned with very specific issues and are in close contact with the market or their members who are directly affected by policies. They therefore dispose of specialized issue-relevant expertise and enjoy informational advantages vis-à-vis policy-makers (Hall and Deardorff, 2006, 73). Thus, when preparing a policy proposal the European Commission consults interest groups to benefit from their highly specialized policy expertise in order to develop policy proposals of high technical quality (Sandholtz, 1992, 5).

The European Commission however also needs information about the preferences of the Council and the European Parliament since they ultimately decide about the adoption of new legislation. Since policy-making is a lengthy process which usually takes several years, the policy positions of the Council and the EP are often not decided upon when the Commission is preparing a policy proposal. Since national governments as well as MEPs strive for reelection, they intend to adopt policies which are preferred by a majority of their voters (Lohmann, 1993, 320). However, national governments and MEPs operate in a highly uncertain environment (Hansen, 1991, 5): They have a broad idea about the policy preferences of their electorates, but they are not entirely sure. Associations

offer help by providing information to governments and MEPs about their constituents' preferences on specific policy decisions. Interest groups are therefore not only exchanging information with the European Commission, but they are also in close contact with national governments and MEPs which aim at taking their concerns into account in order to avoid opposition by major stakeholders (Beyers, 2002; Eising, 2004). Accordingly, Richardson and Coen (2009, 339) point out, "it would be very odd indeed (and certainly foolish) for any policy-maker to plough ahead with a proposal in total ignorance of how the affected interests might react". Hence, since the support of interest groups is important for their reelection, national governments and MEPs carefully consider their demands when making policy decisions. The European Commission can therefore use interest groups as an indicator for the policy positions of the national governments in the Council and the European Parliament.

In conclusion, when drafting a policy proposal, the Commission aims at presenting a technically appropriate solution to a given policy problem, but also wants to make sure that it gains the consent of the Council and the European Parliament. The European Commission requires technical expertise as well as information about the policy positions of major stakeholders to gain an informational advantage over the Council and the EP and to thereby ensure their approval. The following proposition can be derived:

PROPOSITION 2: The European Commission demands information from interest groups.

2.1.2 The Commission's need for legitimacy

The second strategy the Commission can pursue in order to increase the chance of success of a new policy initiative is acquiring the support of citizens to add legitimacy to its policy proposals. Following Schimmelfennig (2001, 2003), I expect that the European Commission engages in "rhetorical action" by strategically using citizen support as a source of legitimacy and by employing legitimacy-based arguments instrumentally to gain approval for its proposals. I assume that the European institutions and the member state governments are rational actors who pursue their own personal interests but who belong to a political community whose constitutive values and norms they share (Schimmelfennig, 2001, 62). They have institutionalized a standard of political legitimacy which is based on the norms and values of the community (Schimmelfennig, 2001, 62). This standard of legitimacy defines which political actions are desirable and permissible. These community norms however do not determine the preferences of political actors. The standard of legitimacy rather constitutes an institutional constraint which the European institutions and member state governments have to take into account when pursuing their own interests (Schimmelfennig, 2001, 63). They have to justify their actions on the ground of common norms and values.

I argue that the most fundamental value of the political community that structures political action is democratic governance. Since all EU member states are liberal democracies, national governments and the European institutions should be committed to democratically organized political institutions that are accountable to citizens (Rittberger, 2005, 62-63). The delegation of competences to the European institutions has however resulted in an asymmetry between "consequentialist" and "procedural" legitimacy which represents the legitimacy deficit (Rittberger, 2003, 2005). Whereas consequentialist legitimacy is based on the efficiency of institutions in producing policy outputs, procedural legitimacy is based on the acceptance of rules and procedures whereby political decisions are taken. The European Commission is a non-majoritarian institution which was established to reduce transaction costs of supranational decision-making and to control compliance by member states (Majone, 1996b; Thatcher and Stone-Sweet, 2002). The legitimacy of the European Commission is therefore of consequentialist nature (Rittberger, 2003, 205). Yet, delegating competences to the Commission has undermined procedural legitimacy since the Commission is largely isolated from electoral scrutiny and only indirectly democratically legitimized.

The European Commission and member states are well aware of this legitimacy deficit: Ever since the Maastricht treaty was signed, the media and academics have devoted considerable attention to the lack of legitimacy of the European polity (Rittberger, 2005, 28-34). The Commission has therefore taken a plurality of initiatives such as the White Paper on European Governance or the Transparency Initiative to increase interest group participation and to thereby enhance its procedural legitimacy and accountability (Kohler-Koch and Finke, 2007; Saurugger, 2008). Since the vibrant debate on the democratic deficit of the European Union threatens the stance of the European Commission, it strategically uses interest group inclusion as a means to increase its procedural legitimacy and to thereby strengthen its position in the light of the perceived democratic deficit. When presenting a new policy proposal the Commission therefore widely consults among interest groups in order to increase the legitimacy of its policy initiative and thus the likelihood that the proposal will be accepted by the Council and the European Parliament. Bouwen (2009, 22-23) reasons similarly by stating that "through wide consultation of private interests with a particular emphasis on consulting representative interests with broad constituencies, the Commission aims at enhancing its legitimacy and securing support for its proposals during the later stages of the legislative process".

Why should the consultation and inclusion of interest groups increase the likelihood of success of a policy proposal? Following Schimmelfennig (2001, 2003), I argue that shaming

plays a fundamental role in binding political actors to the norms and values of the political community. Member state governments and the MEPs have committed themselves to democratically organized political institutions which represent the interests of citizens to which they are accountable. If they choose to deviate from these values, other actors of the community can publicly blame them for not adhering to their commitments. Hence, by not behaving in accordance with the common norms and values, national governments and MEPs risk their standing, their reputation and their credibility in the political community. As Schimmelfennig (2001, 65) points out, the community values even constrain members that have only used the standard of legitimacy strategically to pursue their self-interest since "they can become entrapped by their arguments and obliged to behave as if they had taken them seriously" in order to avoid a loss of credibility and reputation. The European Commission consequently attempts to introduce policy proposals that enjoy support from a large number of citizens. The following proposition can be derived:

PROPOSITION 3: The European Commission demands citizen support from interest groups in order to increase the legitimacy of its policy initiatives.

2.1.3 The Commission's need for support of actors who are politically relevant to the Council and the EP

Finally, I argue that the European Commission can get the approval of the Council and the European Parliament if it enjoys the support of groups which are politically relevant to them (Moravcsik, 1993; Pollack, 1997*a*; Pappi and Henning, 1999). I expect that interest groups are politically relevant to governments and parliamentarians if they possess electoral and/or market power (Lepsius, 1979; Smith, 2000; Fordham and McKeown, 2003). Electoral power is the ability of an interest group to mobilize citizens and voters and market power is the ability to control business investments and job creation (Lepsius, 1979).

National governments as well as MEPs are subject to electoral scrutiny. I assume that they are office-seeking actors who strive for reelection and therefore aim at maximizing votes (Downs, 1957). If a large majority of citizens supports a policy proposal which decision-makers do not approve, these citizens could punish the decision-makers in the next election (Mayhew, 1974). National governments and MEPs therefore attempt to adopt policy proposals which are supported by a majority of their electorate to avoid electoral punishment (Lohmann, 1993, 320). They are therefore particularly attentive to demands raised by interest groups with a large membership base since they can mobilize a large number of citizens and voters and therefore have high electoral power. If Commission proposals are supported by a large number of citizens as mirrored in the support of their associations, the Council and the EP accommodate their interests in order to avoid electoral punishment. The European Commission can therefore exploit the electoral dependence of national governments and MEPs for its own purpose: It can rally the support of associations with a large membership base to gather a high degree of citizen support and thereby ensure the consent of the Council and the EP.

The probability that interest groups are successful in shaping the policy proposal is furthermore strongly affected by their market power backing its demands (Lindblom, 1977). Market power describes the economic weight of an actor in terms of generating growth and controlling jobs. The behavior and performance of companies has a major impact on politics as a loss of jobs, inflation or other economic distress can lead to major opposition from citizens who might punish decision-makers in the next election. One can accordingly observe that fighting unemployment and avoiding inflation are major issues in electoral campaigns. Thus, national governments and MEPs attempt to accommodate the interests of important market actors. Interest groups can therefore yield influence on decision-makers simply because of the impact that business decisions on whether to invest in a specific area can have (Bernhagen and Bräuninger, 2005).

Several studies have documented the impact of industry groups on European policy: Peterson (1991) analyzed the emergence of technology policy at the European level and came to the conclusion that the support of important industry groups was essential for the success of the Commission initiatives in this field. Furthermore, Sandholtz and Zysman (1989) and Cowles (1995) investigated the creation of the 1992 Single Market Programme and argued that the European Commission formed an alliance with powerful industry groups in order to promote its initiative. For instance, shortly after Commission president, Jacques Delors, announced the Commission's intention to create a unified single market by 1992, leading managers of multinational firms declared on the front page of the Financial Times that they would take their companies overseas if member state governments would not follow the Commission's proposal (Cowles, 1995, 515-516).

In conclusion, the likelihood that proposals gain the consent of the Council and the European Parliament increases with the number of voters and powerful market actors backing the policy initiative. The European Commission therefore attempts to rally the support of interest groups with a large membership base and with a high degree of market power. The following proposition can be derived:

PROPOSITION 4: The European Commission demands citizen support and market power from interest groups to gather the support of actors that are politically relevant to the Council and the European Parliament.

2.2 Lobbying coalitions

I have so far derived propositions about goods that are exchanged between interest groups and the European Commission. Interest groups demand influence from the Commission which in turn requests information, citizen support and market power from interest groups. However, it is misleading to simply look at the amount of goods that are provided by individual interest groups to draw conclusions about their influence on the European Commission. Policy issues raise the attention of multiple interest groups at the same time. Lobbying is therefore not an individual endeavor but a complex collective process of multiple interest groups simultaneously trying to shift the policy outcome towards their ideal point. Interest groups are therefore not lobbying individually, they are lobbying together (Hula, 1999). I accordingly expect that the issue-specific grouping of interest groups into lobbying coalitions is the decisive point in understanding lobbying success. Following Baumgartner et al. (2009, 6), I define a lobbying coalition as a "set of actors who share the same policy goal". Thus, interest groups which are located on the same side of the policy space on a given issue form one lobbying coalition.

In order to understand why some interest groups are winning and others are losing on a policy issue, it is therefore important to examine how interest groups align in the policy space on any given policy issue. The European Commission is confronted with a wide variety of interest groups which seek to shape the content of the policy proposal. One individual interest group is not very likely to determine the outcome of the policy formulation process. By contrast, what matters is the aggregated information supply, citizen support and market power of a coalition of interest groups which share the same policy goal. The European Commission most likely takes into account the policy preferences of those interest groups which are members of the strongest coalition since this lobbying team can supply the Commission with more of information, citizen support and more market power than its opposing coalition.

I therefore argue that information supply, citizen support and market power have to be taken into account at the lobbying coalition rather than on the individual interest group level. To illustrate this point, imagine the following example: There are two interest groups 1 and 2. Interest group 1 only supplies a small amount of information, has hardly any members and only disposes of marginal market power. It is however a member of a powerful lobbying coalition A which provides a high share of information, represents a large number of citizens and controls a high degree of market power. By contrast, interest group 2 is able to provide a considerable amount of information, draws on a large membership base and has a lot of market power. Interest group 2 is however a member of a lobbying coalition B which on the aggregate supplies less information to the European Commission, represents fewer citizens and has lower market power than its opposing coalition A. The likelihood that interest group 1 will be successful is therefore higher than the likelihood for interest group 2 since its lobbying coalition A is stronger than lobbying coalition B.

Hence, when trying to understand why some interest groups successfully shape policy formulation while others are not, it is important to take into account the aggregated characteristics of lobbying coalitions rather than the individual interest group properties. What is decisive are however not the values of absolute coalition characteristics, but information supply, citizen support and market power of a lobbying coalition in relation to its opposing coalition. To illustrate this point, imagine the following scenario: There are two policy issues and on each issue, two lobbying coalitions are trying to influence policy formulation. On issue 1, lobbying coalition A might represent 20,000 citizens and lobbying coalition B might represent 60,000 citizens. On issue 2, lobbying coalition Cmight only represent 8,000 citizens and lobbying coalition D 2,000 citizens. A comparison of the absolute values of citizen support would lead to the conclusion that both, lobbying coalition A and lobbying coalition B are stronger than lobbying coalition C and D. This is however misleading since the relative citizen support as compared to the opposing coalition on the same issue is decisive. According to this measurement, lobbying coalition A supplies 25 per cent, coalition B supplies 75 per cent, coalition C provides 80 per cent and coalition D provides 20 per cent of the overall citizen support to the European Commission. Hence, one would conclude that lobbying coalition B and C should have higher chances to influence policy formulation. Thus, bringing the propositions about the exchange goods together with the lobbying coalition as the decisive level of analysis, the following hypotheses can be formulated:

Hypothesis 1:

The higher the relative information supply by a lobbying coalition, the higher the probability that an interest group belonging to this lobbying coalition influences policy formulation.

Hypothesis 2:

The higher the relative citizen support of a lobbying coalition, the higher the probability that an interest group belonging to this lobbying coalition influences policy formulation.

Hypothesis 3:

The higher the relative market power of a lobbying coalition, the higher the probability that an interest group belonging to this lobbying coalition influences policy formulation.

3 Research design

In this section, I explain how the dataset for the empirical test of the presented hypotheses was constructed. I first discuss the measurement of interest group influence. I then illustrate the selection of policy issues and interest groups before explaining the operationalization of the explanatory and control variables.

3.1 Measuring interest group influence

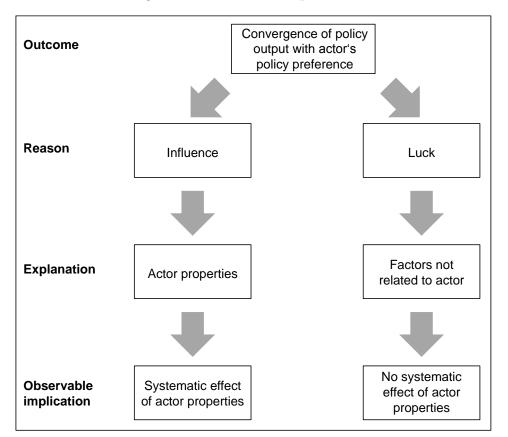
Influence is understood as the ability of an actor to shape a decision in line with its preference (Dür, 2008*b*, 561). The necessary condition for influence is thus the convergence of policy preferences of interest groups with the policy output.⁴ Convergence is however not a sufficient condition for influence (see figure 2). It is important to causally link interest groups' policy preferences with the policy output in order to distinguish influence from pure luck (Barry, 1980*a*,*b*). This can be done by empirically analyzing whether actor properties have a systematic, that is statistically significant effect on convergence. If there is a systematic association between actor properties and the policy output that is based on convincing theoretical reasoning, one can infer that interest groups indeed influenced the policy-making process. I accordingly measure interest groups with the position of the Commission before and after the consultation preceding the adoption of the final policy proposal in order to draw conclusions about the winners and the losers of the policy formulation process.

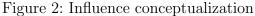
I used a recently developed quantitative text analysis technique called *Wordfish* to measure policy preferences of interest groups since it allows to quickly analyze large quantities of texts without requiring any prior information about the documents (Proksch and Slapin, 2008; Slapin and Proksch, 2008). Based on the relative frequency of words and assuming that words are distributed according to a Poisson distribution, *Wordfish* provides policy positions estimates for political documents on an unidimensional scale. I therefore assume that the policy issues I investigate in this article are unidimensional. This assumption is supported by the analysis of Baumgartner et al. (2009) who found that two interest group coalitions are fighting each other on the same dimension for most of the 98 policy issues they studied in the United States.

In order to measure policy positions of interest groups, their submissions in online consultations of the European Commission were analyzed. The Commission releases

⁴The policy output in this study is the final policy proposal officially adopted by the European Commission as this study focuses on interest group influence during the policy formulation stage.

a preliminary position paper and invites interest groups to submit comments for an eight-week consultation period before it officially adopts its legislative proposal. Even though consultations are of course not the only channel through which interest groups can lobby the Commission, most interest groups that attempt to shape the content of a proposal will most likely also submit a consultation comment as this the easiest way of access. Empirical research accordingly shows that a wide variety of actors is represented in the consultations such as NGOs, companies and business associations originating from different geographical levels (Quittkat and Finke, 2008; Klüver, 2010c).





I extracted the Commission position before the consultation from the preliminary draft proposal which can take various forms such as a Green or White Paper, a Communication or a Working Paper. In order to measure the Commission position after the consultation, I performed a text analysis of a summary of the final legislative proposal that was issued by the European Parliament.⁵ Since the validity of the interest group influence measurement crucially depends on the correct estimation of the Commission position, I tested several document types in an in-depth case study of one single policy issue as

 $^{^5{\}rm These}$ summaries can be downloaded from the European Parliament Legislative Observatory on http://www.europarl.europa.eu/oeil.

well as by cross-checking the estimates across documents types for all 56 policy issues (see chapter 4 in Klüver, 2009, 2010c). According to these analyses, the text analysis of the EP summaries provides the most accurate policy position measurement for the Commission position after the consultation. In order to test whether the Commission texts can be compared to the interest group submissions, I furthermore analyzed the vocabulary used in both document types. Of all words that are used by the European Commission, on average 91.62 per cent also occur in the interest group submissions so that one can conclude that both documents types can be analyzed simultaneously.

Before I was able to apply *Wordfish* to the interest group and Commission documents, the texts needed to be preprocessed. In a first step, I therefore converted all documents to plain text files. I then applied a *PHP* script to remove symbols, to unify British and American spelling and to convert all words to lowercase. Additionally, I manually deleted all interest group names, self-descriptions as well as contact details and I then corrected spelling mistakes. Afterwards, I removed all direct quotations of the Commission paper from interest group submissions because these would otherwise automatically score closer to the European Commission position than other submissions not containing any citations. In a next step, I used *jfreq* to delete stop words, numbers and currencies and to stem the words (reducing them to their roots) before computing 56 issue-specific word frequency matrices on which the *Wordfish* analyses are based.⁶ Finally, following the advice of Proksch and Slapin (2009) I deleted all stems that were mentioned in less than 15 per cent of all texts per policy issue.

Since quantitative text analysis techniques are often criticized for a lack of validity, I tested the validity of the *Wordfish* analysis in two different ways: At first, I carried out a case study of one single policy issue for which I coded the interest group and Commission documents manually and then compared the results with policy position estimates obtained by *Wordfish* and *Wordscores* (Klüver, 2009). The position estimates gathered by hand-coding highly correlate with those produced by *Wordfish* and *Wordscores* and the different techniques therefore cross-validate each other.⁷ As a second validity check, I asked interest groups in a survey to name five major cooperation partners and one major opponent concerning specific policy issues they were working on. If the *Wordfish* analysis provides valid estimates, cooperation partners should be located on the same side of the opposing side of the policy space. 79.54 per cent of all interest groups which reported partners and opponents (n=347) were placed on the correct side of the policy space which strongly supports the validity of the text analysis. In order to check the robustness of

 $^{^{6}}$ *jfreq* can be downloaded from www.williamlowe.net.

⁷Further information about the survey will be provided later in this section.

the policy position estimation, I conducted further *Wordfish* analyses for word matrices after removing stems that were only mentioned in 10 per cent and after removing stems that were only mentioned in 20 per cent of the texts per issue. In addition, I performed further analyses after the two most extreme texts at both ends of the policy scale per issue were dropped from the word frequency matrix. The results correlate highly and the policy position estimation is therefore robust to changes of the word frequency matrix.

3.2 Selection of policy issues and interest groups

Identification in *Wordfish* is achieved by setting the mean of all policy positions to zero and by fixing the standard deviation to one which implies that absolute distances are not comparable across different issues. I circumvent this problem by drawing on a dichotomous influence measurement. If the distance between interest groups and the European Commission is smaller after the consultation than before the consultation, interest groups are considered to be influential. If the distance has however increased, interest groups are not considered to be influential. The influence measurement is illustrated in figure 3.

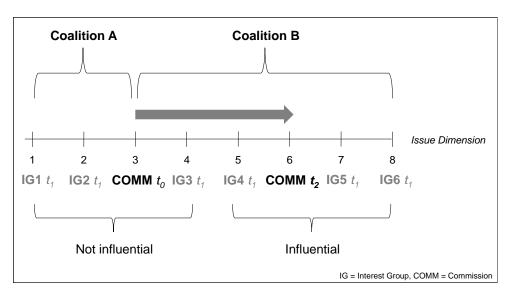


Figure 3: Influence and coalition measurement

This study analyzes interest group influence across a wide variety of policy issues and interest groups. The data was selected in a two-stage procedure: I first selected 56 policy proposals and I then picked all interest groups which were lobbying the European Commission concerning these issues. Policy proposals were selected on the basis of five criteria: First, since the European Commission only disposes of the monopoly of legislative initiative in the first pillar of the European Union, I only selected policy issues which fall within the scope of this pillar. Second, I only concentrate on legislative proposals that were adopted between 01.01.2000 and 31.12.2008 since online consultations were introduced in 2000 and since this relatively short period allows interest group representatives to recall their lobbying activities surrounding specific policy issues. Third, I only chose policy proposals for directives and regulations in order to control for the impact of policy proposals by only concentrating on general binding legislation. Fourth, the sample only includes Commission proposals that are adopted under the Codecision or Consultation procedure in order to control for the decision-making mode. Fifth, I only selected legislative proposals for which the European Commission conducted a non-standardized publicly accessible consultation. This allows to avoid including highly technical and politically irrelevant proposals, but to focus instead only on politically important policy issues as the European Commission only consults on "major" policy initiatives (European Commission, 2002). In addition, consultations provide textual data that is needed for the measurement of interest group influence.

Based on these five selection criteria I screened the European Commission database *Prelex* and arrived at a sample of 70 legislative proposals. However, I was not able to analyze all of these proposals for several reasons: Six proposals had to be dropped since the Commission did not release any position paper that could be used to measure the policy position of the Commission before the consultation. Two further policy issues were excluded since less than ten interest groups submitted consultation comments and since *Wordfish* analyses based on such a small number of texts produce unreliable results (Proksch and Slapin, 2009). In addition, five legislative proposals were removed from the sample for other reasons.⁸ Finally, I excluded the Commission proposal on "Registration, Evaluation, and Authorization of Chemicals" (REACH) since more than 6,000 interest groups submitted a consultation comment so that the analysis of this single issue would consume more resources than all other issues together. Hence, the sample on which the empirical analysis is based consists of 56 legislative proposals.

The second step concerns the selection of interest groups. In the consultations that preceded the adoption of the 56 selected proposals, 4,871 comments were submitted by various actors. I classified all consultation participants into nine groups: Associations (2,643), companies (775), national public authorities (746), individuals (282), researchers (187), international organizations (55), third states (57), political parties (8) and others (118). I only concentrated on associations and companies since they are the largest and

⁸Two proposals were removed from the sample since the European Commission released more than one position paper prior to the consultation so that one cannot determine one single policy dimension which is necessary for the *Wordfish* analysis. Two further proposals were dropped from the sample since they merely transpose an international convention into European law. I finally excluded one Commission proposal since it simply recodifies already existing legislation.

most important group of actors that lobby the European institutions in general (Wonka et al., 2010) and that participate in online consultations in particular (Quittkat and Finke, 2008).⁹ I furthermore had to exclude non-English submissions (n=899) and submissions that contained less than 100 words (n=63) as *Wordfish* only works with texts written in the same language and with a minimum number of words.

3.3 Operationalization of independent variables

Explanatory variables were measured drawing on an analysis of interest groups' consultation comments and on an online survey that I conducted among all interest groups which participated in the 56 Commission consultations. *Information supply* was measured by the number of words of interest group consultation submissions after removing text from these documents that carries no substantial meaning such as stopwords, repetitions of consultation questions or contact details. In order to measure citizen support and market power, I conducted an online survey among interest groups which participated in the 56 consultations. The survey was launched in June 2009 and was online until January 2010. The response rate is 38.67 per cent. *Citizen support* was operationalized by the number of represented individuals and *market power* was measured by the annual turnover and the number of employees of the company and the represented business sector respectively. All variables were measured on a five point ordinal scale. In order to have one single measure for market power, I generated an additive index which sums the values of the indicators and divides the sum by the number of indicators.¹⁰

Since information supply, citizen support and market power have been measured on the individual interest group level, they had to be furthermore aggregated to measure lobbying coalition characteristics. The first step in operationalizing lobbying coalition characteristics is the identification of lobbying coalitions. Since I assumed that all policy issues are characterized by unidimensional policy spaces, I was able to place all actors on one straight line representing the policy space of a given policy issue according to their policy position estimates obtained by the quantitative text analysis. The reference point for the definition of lobbying coalitions is the European Commission at time point t_0 . All interest groups left of the Commission at t_0 form lobbying coalition A and all interest groups on the right constitute lobbying coalition B (see figure 3). All interest

 $^{^{9}}$ Elsewhere, I also analyzed the impact of national authorities on policy formulation in the EU (Klüver, 2010*c*). It turns out that they are on average not able to determine the content of the policy proposal.

¹⁰I performed a principal component factor analysis to check whether these two indicators measure the same underlying latent variable. According to the Kaiser criterion, which suggests that factors should have an Eigenvalue higher than 1.0, both indicators measure indeed the same latent variable. Correspondingly, the factor loadings of both indicators are both above 0.92 which also indicates the existence of one underlying factor.

groups which are located on the same side of the initial Commission position are pushing the Commission into the same direction and can therefore be considered as one lobbying team. The aggregated information supply, citizen support and market power of a lobbying coalition was measured by summing the information supply, citizen support and market power of its members.

I then measured relative information supply, relative citizen support and relative market power of lobbying coalitions in the following way using citizen support as an example. The relative citizen support z_A by lobbying coalition A equals the absolute citizen support x_A by lobbying coalition A divided by the sum of absolute citizen support by lobbying coalition $A(x_A)$ and lobbying coalition $B(x_B)$ with both coalitions working on the same policy issue times 100. This measure ranges from 0 to 100 and as this is a relative measure, the values for lobbying coalition A provides 40 per cent of the overall citizen support on a policy issue, its opposing lobbying coalition B supplies 60 per cent. Similarly, if lobbying coalition A provides 41 per cent of the citizen support, lobbying coalition B necessarily provides 59 per cent. Thus, a 1 per cent increase in the relative citizen support of lobbying coalition A implies at the same time a one per cent decrease in relative citizen support of lobbing coalition B. This has to be taken into account when interpreting regression coefficients in the next section.

$$z_A = \frac{x_A}{x_A + x_B} \cdot 100$$

Based on previous findings in interest group research, control variables on the interest as well as issue level are included in the analysis (e.g. Dür and de Bièvre, 2007*b*; Mahoney, 2008; Klüver, 2010*b*). The salience of policy issues was measured by the number of submissions received during the online consultations. The conflictuality of a policy issue is operationalzed by dividing the number of interest groups forming the smaller lobbying coalition by the number of interest groups constituting the bigger coalition on any given policy issue. This conflictuality measure ranges from 0 to 1 whereby 0 indicates no conflict and 1 indicates maximum conflict. The complexity of a policy issue was measured relying on three indicators: The number of words, the number of recitals and the number of articles of a policy proposal (see also Franchino, 2000; Kaeding, 2006; Steunenberg and Kaeding, 2009). In order to arrive at one single measure for complexity, I conducted a principal component factor analysis and used factor scores to measure complexity.¹¹

¹¹The factor analysis retained only one factor according to the Kaiser criterion which suggests to keep only those factors with Eigenvalues equal or higher than 1. This factor accounts for 83.6 per cent of the variance and the factor loadings are all above 0.88.

4 Data Analysis

In this section, I test the hypotheses derived from the theoretical model. In order to test the theoretical expectations, the hierarchical structure of the data has to be considered as lobbying takes place concerning specific policy issues. Interest groups are thus clustered into policy issues so that interest groups that lobby the European Commission concerning the same issue are subject to the same contextual characteristics. In order to acknowledge the hierarchical data structure, I use multilevel modeling to analyze the data by distinguishing between the interest group (first) level and the issue (second) level. Since interest group influence is measured dichotomously, I estimate multilevel logistic regression models to test the hypothesized effects.

Unfortunately, the dataset includes a lot of missing values due to survey non-response: For about 60 per cent of the cases, information about citizen support is missing and for approximately 78 per cent of the cases, information about market power is missing. There are several strategies to deal with missing data of which multiple imputation and listwise deletion are most promising (Allison, 2002). Multiple imputation should however be avoided for variables that have 50 per cent or more missing values Royston (2004, 240). I therefore applied listwise deletion which can be conducted without concerns if data is missing completely at random (Rubin, 1976). If this is the case, the dataset that is reduced by cases with missing values is a random subset of the original sample. Since the dependent variable as well as all control variables are similarly distributed in the full and the reduced sample, the listwise deletion sample can be indeed regarded as a random subsample of the original sample so that listwise deletion can be employed without concerns.¹²

4.1 Interest group influence and lobbying coalitions

Table 3 presents the results of the multilevel regression analysis. The first column contains the results of the empty model which does not include any predictors and which is indicated to evaluate the fit of the other models. The second column contains the results of a random intercept regression including the explanatory variables and the model in column three includes in addition relative information supply, relative citizen support and relative market power of individual interest groups as well as three control variables

 $^{^{12}}$ In order to test the robustness of the findings, I performed further bivariate regression models to check whether the effects of lobbying coalition characteristics also hold when a larger number of cases is analyzed by only focusing on one coalition characteristic at a time. The samples included 2696 cases for the analysis of information supply, 1066 cases for the analysis of citizen support and 594 cases for the analysis of market power. The effects of lobbying coalition characteristics in the larger bivariate samples correspond to the effects detected in the listwise deletion sample (n=291).

Variables	Empty Model	Without controls	With controls
Fixed effects			
LOBBYING COALITION CHARACTERISTICS			
Relative information supply		1.023^{**}	1.024^{*}
		(0.012)	(0.012)
Relative citizen support		1.017**	1.021**
		(0.008)	(0.009)
Relative market power		1.039***	1.037^{***}
		(0.013)	(0.013)
INTEREST GROUP CHARACTERISTICS			
Relative information supply			0.894
			(0.101)
Relative citizen support			0.989
			(0.018)
Relative market power			0.950^{**}
			(0.024)
Issue Characteristics			
Salience			0.995
			(0.006)
Conflict			4.259
			(5.273)
Complexity			1.477
			(0.446)
Random effects			
Issue level variance	0.746	3.822	2.240
Model fit			
N / Issues	291 / 48	291 / 48	291 / 48
AIC	399	341	339
BIC	406	359	380
LR Test, $Prob > Chi2$		0.000	0.030

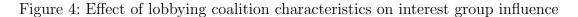
Table 3: Multilevel logistic regression explaining interest group influence

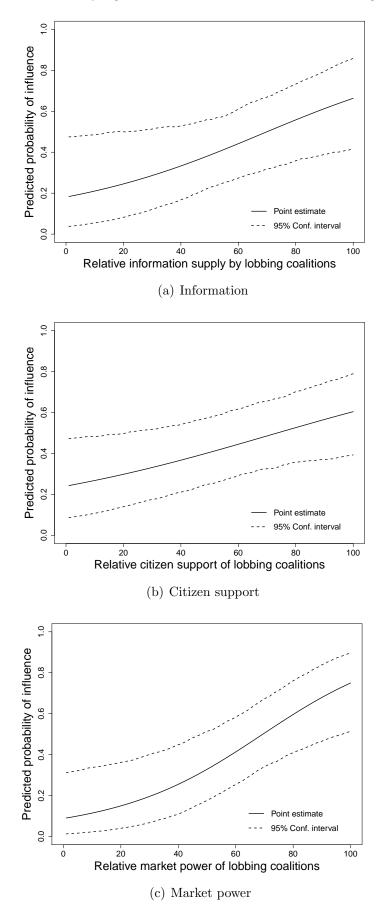
*** $p \le 0.01$, ** $p \le 0.05$, * $p \le 0.10$, coefficients represent odds ratios, standard errors in parentheses, the reference model for the likelihood ratio test is the model left of the model in question, Likelihood ratio test vs. logistic regression: Prob > Chi² = 0.009

on the issue level. In both models, relative information supply, relative citizen support and relative market power of lobbying coalitions have a statistically significant positive effect on interest group influence. A one per cent increase in relative information supply by lobbying coalition A, which at the same time implies a one per cent decrease in relative information supply by its opposing lobbying coalition B, increases the chance of interest groups which belong to lobbying coalition A to influence policy formulation by 2.3 per cent (2.4 per cent when control variables are included). As expected in the theoretical model, relative citizen support of lobbying coalitions also has a statistically significant positive effect on interest group influence. If relative citizen support of lobbying coalition A increases by one per cent, which at the same time implies a one per cent decrease in relative citizen support by its opposing coalition B, the chance of interest groups which are members of coalition A to influence policy formulation rises on average by 1.7 per cent (2.1 per cent if control variables are included). Similarly, relative market power of lobbying coalitions also has a statistically significant positive effect on interest group influence. As relative market power of lobbying coalition A rises by one per cent, which at the same time implies a one per cent decrease in relative market power of its opposing lobbying coalition B, the chance of interest groups which belong to lobbying coalition Ato influence policy formulation increases by 3.9 per cent (3.7 per cent if control variables are included). By contrast, relative information supply and relative citizen support of individual interest groups do not have a statistically significant effect and relative market power of individual interest groups even has a negative effect on interest group influence. Thus, relative information supply, relative citizen support and relative market power have an important positive effect on the lobbying coalition, but not on the interest group level. According to the AIC and the likelihood ratio test, the model including the control variables has the highest explanatory model. By contrast, the BIC, which constitutes the most rigorous model fit measure, indicates that the model only including the three lobbying coalition characteristics is superior to the third model. In any case, the empirical analysis supports the hypotheses derived from the theoretical model: Relative information supply, relative citizen support and relative market power of lobbying coalitions have a positive effect on the ability of interest groups to shape the content of the Commission's policy proposal.

In order to illustrate these effects, I simulated predicted probabilities and first differences as suggested by King, Tomz and Wittenberg (2000). Figure 4 displays the predicted probabilities of interest group influence as (a) relative information supply, (b) relative citizen support and (c) relative market power of lobbying coalitions change from their minimum (0) to maximum value (100) while holding all other variables at their means. The point estimates of the predicted probabilities are indicated by the solid lines and the 95 per cent confidence intervals are illustrated by the dashed lines. The probability to influence the policy proposal of the European Commission steadily increases with a rise in relative information supply, in relative citizen support or in relative market power of lobbying coalitions while other variables are held constant. Thus, all three lobbying coalition characteristics have a steady positive effect on the ability of interest groups to influence policy formulation.

In order to demonstrate the size of these effects, I estimated first differences to illustrate how the probability to influence policy formulation changes when lobbying coalition characteristics are altered while holding other variables at their means. Table 4 contains the differences in lobbying coalition characteristics in the first column and the associated estimated difference in the probability to influence policy formulation in column two together with a 95 per cent confidence interval. If relative information supply by lobbying coalitions augments from for 25 to 50, the probability to influence policy formulation





increases by 11.4 percentage points. Likewise, an increase in relative information supply from 50 to 75 leads to a rise in the probability to influence the policy proposal by 13.6 percentage points. Similarly, an increase in relative citizen support from 25 to 50 per cent increases the probability of its member groups to influence policy-making on average by 9.4 percentage points while other variables are held at their means. Correspondingly, when comparing two lobbying coalitions of which lobbying coalition A provides 50 per cent of the citizen support per issue and lobbying coalition C supplies 75 per cent of the citizen support provided on an issue, the probability of interest groups which belong to coalition C to influence policy formulation is approximately 10.6 percentage points higher than the probability for groups belonging to coalition A. Relative market power has an even stronger effect: An increase in relative market power from 25 per cent to 50 per cent increases the probability to influence policy formulation on average by 15.3 percentage points. An increase in relative market power from 50 to 75 per cent similarly leads to an increase in the probability to exert influence by 22.2 percentage points.

Difference: Coalition features	Difference: Influence probability	95% Confidence interval	
Relative information supply			
0 - 25%	0.082	0.007	0.137
25 - 50%	0.114	0.008	0.212
50 - 75%	0.136	0.005	0.269
75 - 100%	0.128	0.011	0.234
Relative citizen support			
0 - 25%	0.074	0.007	0.127
25 - 50%	0.094	0.016	0.170
50 - 75%	0.106	0.009	0.199
75 - 100%	0.101	0.009	0.187
Relative market power			
0 - 25%	0.082	0.036	0.134
25 - 50%	0.153	0.076	0.234
50 - 75%	0.222	0.074	0.351
75 - 100%	0.200	0.078	0.301

Table 4: First differences: Effect of lobbying coalition characteristics on interest group influence

Only lobbying coalition characteristic in question is changed; all other variables are hold at their means

4.2 Free-riding?

I have demonstrated so far that characteristics of lobbying coalitions have an important effect on the ability of interest groups to influence policy formulation. However, it is not clear why the lobbying coalition characteristics matter. There are two primary explanations for the effect of lobbying coalition characteristics (see figure 5): First, it is possible that only few powerful interest groups influence policy formulation. Hence, other members of a lobbying coalition could benefit from the influence that few strong interest groups exert which share the same policy goal. Accordingly, weak interest groups could simply "free-ride" on the influence of others and are therefore merely lucky to get what they want. Second, it is also possible that the sum of the characteristics of all interest groups which form a lobbying coalition makes the difference. Accordingly, the convergence of policy preferences with the policy proposal would be caused by the sum of the characteristics of each individual member of the coalition. In both cases, the characteristics of lobbying coalitions exhibit a systematic, that is statistically significant effect on interest group influence. This systematic effect does however not allow to judge whether only a few powerful groups within the coalition influenced policy formulation or whether all interest groups simultaneously exerted influence.

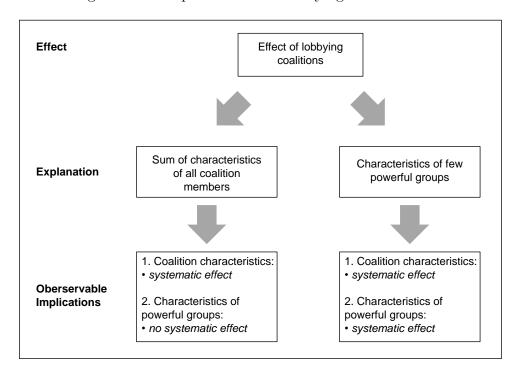


Figure 5: Conceptualization of lobbying coalition effects

In order to empirically distinguish between the two explanations, I took a sample of the dataset which only contains the strongest interest groups in terms of relative information supply, relative citizen support or relative market power. More specifically, I only selected interest groups which belonged to the strongest 10 per cent on a given policy issue in terms of relative information supply, relative citizen support and/or relative market power. If indeed only a few powerful interest groups influence policy formulation while their coalition partners simply free-ride, their individual characteristics should have a systematic effect on interest group influence when these powerful groups are analyzed separately. By contrast, if one finds that the individual characteristics of powerful interest groups do not have a systematic effect on policy formulation, one can conclude that the

effect of lobbying coalition characteristics cannot be explained by a few powerful interest groups so that weak interest groups cannot simply free-ride on the efforts of a few strong groups.

The multilevel analyses provide no evidence in favor of the argument that only few strong groups exert influence whereas others are free-riding (see table 5). Neither relative information supply nor relative citizen support or relative market power of individual interest groups have a statistically significant positive effect on interest group influence. One could of course argue that statistically significant effects are quite unlikely given the small number of cases. However, not even the direction of the effects of citizen support and market power or the model fit provides support for the free-riding explanation. In addition, the last row of table 5 indicates the correlation between interest group properties and interest group influence for the sample of strong interest groups. The correlations do not reveal any positive association between the individual interest groups characteristics and interest group influence which also does not provide any support for the free-riding explanation. These results are robust across different thresholds for strength: I repeated the analysis for the 25 per cent, 20 per cent, 15 per cent and 5 per cent strongest groups and could also not detect any systematic pattern that links individual interest group properties and interest group influence. Hence, the positive effect of lobbying coalition characteristics cannot be explained by the properties of a small number of strong groups.

Variables	Information	Citizen support	Market power
Fixed effects			
INTEREST GROUP CHARACTERISTICS			
Relative information supply	1.015		
	(0.042)		
Relative citizen support		0.990	
		(0.011)	
Relative market power			0.976**
			(0.022)
Random effects			
Issue level variance	2.024	1.155	0.089
Model fit			
N / Issues	278 / 54	134 / 41	69 / 29
AIC	357	185	94
BIC	368	193	101
LR Test, $Prob > Chi2$	0.726	0.397	0.253
Pearson's r	-0.011	-0.062	-0.140

Table 5: Multilevel logistic regression testing the effect of individual characteristics for the 10 per cent strongest groups

*** $p \leq 0.01$, ** $p \leq 0.05$, * $p \leq 0.10$, coefficients represent odds ratios, standard errors in parentheses, the reference model for the likelihood ratio test is the empty model

In conclusion, the preceding analyses confirm the hypotheses derived from the theoretical exchange model. All three lobbying coalition characteristics have a statistically significant positive effect on interest group influence across different model specifications. The higher relative information supply, relative citizen support and relative market power of a lobbying coalition, the higher the chance of its member interest groups to influence policy formulation. I furthermore demonstrated that the positive effects of lobbying coalition characteristics are not due to the properties of few powerful interest groups whereas other groups are just free-riding on their impact. There is no systematic pattern that links the characteristics of the most powerful individual interest groups with lobbying success. What seems to matter is therefore the sum of the characteristics of all coalition members rather than the individual properties of few powerful interest groups. Hence, if interest groups want to increase their chances to influence policy formulation, they need to form a powerful lobbying coalition with other interest groups which are able to supply a high amount of information and which dispose of a high degree of citizen support and market power. In order to understand why some interest groups win while others lose, it is therefore important to take into account the issue-specific alignment of interest groups into lobbying coalitions as well as their aggregated characteristics.

5 Conclusion

Interest group influence is a central theme in the study of politics. The question of who wins and who loses is a recurring puzzle that has preoccupied generations of political scientists. However, despite the central importance of interest group influence, only few have studied it so that it is still unclear what makes an interest group a winner or a loser. This article therefore investigated why some interest groups are able to influence policy formulation in the European Union while others are not. I developed a theoretical exchange model that identifies information supply, citizen support and market power of coalitions of interest groups promoting the same policy objective as the major determinants of interest group influence. Drawing on a new measurement approach to interest group influence, I tested these theoretical expectations across a wide variety of policy issues and interest groups.

The empirical analysis confirms the hypotheses derived from the theoretical model: Across different model specifications information supply, citizen support and market power of lobbying coalitions have a positive effect on the ability of interest groups to influence policy formulation. It can therefore be concluded that lobbying can indeed be conceptualized as an exchange relationship of interdependent actors. The European Commission trades influence for information, citizen support and market power. Thus, the key to lobbying

success is providing the Commission with these three goods. Variation in influence can therefore be explained by the amount of information, citizen support and market power that interest groups provide to the European Commission.

However, I have moreover demonstrated that interest group influence cannot be explained by merely looking at individual interest group characteristics. Looking solely at the properties of individual interest groups disregards the fact that decision-makers are confronted with a plurality of interest groups which simultaneously attempt to influence political decisions. Lobbying is therefore a collective enterprise: Policy issues raise the attention of numerous interest groups which are simultaneously lobbying the European Commission. If an interest group supplies a considerable amount of information, represents a large number of citizens and provides a high degree of market power, but belongs to a lobbying coalition which only provides a small amount of these goods relative to its opposing coalition, the interest group has a very low chance to influence policy formulation. By contrast, an interest group which only provides little information, represents a few citizens and hardly disposes of any market power can still have a good chance to be influential if it belongs to a lobbying coalition that supplies more of these goods to the Commission than its opposing coalition. Thus, the higher the relative information supply, citizen support and market power of a lobbying coalition as compared to the opposing lobbying team, the higher the chance of its member interest groups to influence policy formulation. I have furthermore demonstrated that the positive lobbying coalition effects are not due to the properties of few powerful interest groups whereas other groups are just free-riding on their impact. There is no systematic pattern that links the characteristics of the most powerful individual interest groups with lobbying success. What seems to mater is therefore the sum of the characteristics of all coalition members rather than the individual properties of few powerful interest groups.

In conclusion, this article has provided important insights for the study of interest groups and the European Commission. I demonstrated that lobbying cannot be understood as an individual endeavor but that we have to take into account how interest groups align in the policy space on any given policy issue in order to understand why some interest groups win and others lose. This constitutes an important finding for the study of interest groups as scholars largely attempted to explain variation in influence with individual group characteristics and as a result of that have often arrived at contradictory findings. Future interest group research therefore has to take into account the aggregated characteristics of entire lobbying coalitions of interest groups when trying to explain their impact on policy outcomes. This applies to interest group research in any political context as policy issues trigger the attention of numerous interest groups no matter in which political system they are introduced. In addition, this article contributes to our knowledge of preference formation within the European Commission. I demonstrated that interest groups are actively seeking to influence policy formulation and that they are indeed able to shape the Commission proposal if they are able to provide information, citizen support and/or market power. Thus, in order to understand the emergence of policy outcomes, one cannot solely look at the policy preferences of the three major institutions. Instead we have to examine how their preferences come about. Future research therefore needs to systematically take into account interest group pressure when trying to explain policy outcomes in the European Union.

References

Allison, Paul D. 2002. Missing data. Thousand Oaks: Sage.

- Austen-Smith, David. 1993. "Information and influence: Lobbying for agendas and votes." American Journal of Political Science 37(4):799–833.
- Barry, Brian. 1980a. "Is it better to be powerful or lucky? Part 1." *Political Studies* 28(2):183–194.
- Barry, Brian. 1980b. "Is it better to be powerful or lucky? Part 2." *Political Studies* 28(3):338–352.
- Baumgartner, Frank R., Jeffrey M. Berry, Marie Hojnacki, David C. Kimball and Beth Leech. 2009. Lobbying and Policy Change: Who Wins, Who Loses, and Why. Chicago: University of Chicago Press.
- Bernhagen, Patrick and Thomas Bräuninger. 2005. "Structural Power and Public Policy: A Signaling Model of Business Lobbying in Democratic Capitalism." *Political Studies* 53(1):43–64.
- Beyers, Jan. 2002. "Gaining and Seeking Access: The European Adaptation of Domestic Interest Associations." *European Journal of Political Research* 41(5):585–612.
- Beyers, Jan, Rainer Eising and William Maloney. 2008. "Researching Interest Group Politics in Europe and Elsewhere: Much We Study, Little We Know?" West European Politics 31(6):1103–1128.
- Bouwen, Pieter. 2004. "Exchanging Access Goods for Access: A Comparative Study of Business Lobbying in the European Union Institutions." *European Journal of Political Research* 43(3):337–369.
- Bouwen, Pieter. 2009. The European Commission. In Lobbying in the European Union: Institutions, actors, and issues, ed. David Coen and Jeremy Richardson. Oxford: Oxford University Press pp. 19–38.
- Broscheid, Andreas and David Coen. 2003. "Insider and outsider lobbying of the European Commission: An informational model of forum politics." *European Union Politics* 4(2):165–189.
- Coen, David. 1997. "The Evolution of the Large Firm as a Political Actor in the European Union." Journal of European Public Policy 4(1):91–108.
- Cowles, Maria Green. 1995. "Setting the Agenda for a New Europe: The ERT and EC 1992." Journal of Common Market Studies 33(4):501–526.
- Crombez, Christophe. 2002. "Information, Lobbying and the Legislative Process in the European Union." European Union Politics 3(7):7–32.

Downs, Anthony. 1957. An economic theory of democracy. New York: Harper.

Dür, Andreas. 2008a. "Interest groups in the European Union: How powerful are they?" West European Politics 31(6):1212–1230.

- Dür, Andreas. 2008b. "Measuring Interest Group Influence in the EU: A Note on Methodology." European Union Politics 9(4):559–576.
- Dür, Andreas and Dirk de Bièvre. 2007*a*. "Inclusion without influence? NGOs in European Trade Policy." *Journal of Public Policy* 27(1):79–101.
- Dür, Andreas and Dirk de Bièvre. 2007b. "The Question of Interest Group Influence." Journal of Public Policy 27(1):1–12.
- Eising, Rainer. 2004. "Multilevel Governance and Business Interests in the European Union." *Governance* 17(2):211–245.
- Eising, Rainer. 2007. "Institutional Context, Organizational Resources and Strategic Choices: Explaining Interest Group Access in the European Union." European Union Politics 8(3):329–362.
- European Commission. 2002. Towards a reinforced culture of consultation and dialogue - General principles and minimum standards for consultation of interested parties by the Commission. COM(2002) 704 final, URL (consulted April 2010): http://ec.europa.eu/governance/docs/comm_standards_en.pdf.
- Fordham, Benjamin O. and Timothy J. McKeown. 2003. "Selection and influence: Interest groups and congressional voting on trade policy." *International Organization* 57(3):519–549.
- Franchino, Fabio. 2000. "Statutory discretion and procedural control of the European Commission's executive functions." *Journal of Legislative Studies* 6(3):28–50.
- Gray, Virginia and David Lowery. 1996. "A niche theory of interest representation." Journal of Politics 58(1):91–111.
- Hall, Richard L. and Alan Deardorff. 2006. "Lobbying as legislative subsidy." *American Political Science Review* 100(1):69–84.
- Hansen, John Mark. 1991. Gaining Access: Congress and the farm lobby, 1919-1981. University Press of Chicago.
- Hula, Kevin W. 1999. Lobbying together: Interest group coalitions in legislative politics. Washington D.C.: Georgetown University Press.
- Kaeding, Michael. 2006. "Determinants of Transposition Delay in the European Union." Journal of Public Policy 26(3):229–253.
- King, Gary, Michael Tomz and Jason Wittenberg. 2000. "Making the most of statistical analyses: Improving interpretation and presentation." *American Journal of Political Science* 44(2):341–355.
- Klüver, Heike. 2009. "Measuring interest group influence using quantitative text analysis." European Union Politics 10(4):535–549.
- Klüver, Heike. 2010a. "Europeanization of lobbying activities: When national interest groups spill over to the European level." Journal of European Integration 32(2):175–191.

- Klüver, Heike. 2010b. Lobbying and the issue context: A quantitative analysis of interest group influence in the European Union. Paper presented at the conference "Quantifying Europe: Pitfalls and Challenges of Data Generation Processes": Mannheim, 13-14 December 2010.
- Klüver, Heike. 2010c. Lobbying in the European Union: Interest group influence on policy formulation. Ph.D. Thesis: University of Mannheim.
- Knoke, David and David Prensky. 1984. "What Relevance Do Organization Theories Have for Voluntary Associations?" Social Science Quarterly 65(3):3–20.
- Kohler-Koch, Beate and Barbara Finke. 2007. "The institutional shaping of EU-society relations: A contribution to democracy via participation?" *Journal of Civil Society* 3(3):205–221.
- Lepsius, Rainer M. 1979. Soziale Ungleichheit und Klassenstrukturen in der Bundesrepublik Deutschland. In Klassen in der europäischen Sozialgeschichte, ed. Hans-Ulrich Wehler, Heinz-Gerhard Haupt and Hans Rosenberg. Göttingen: Vandenhoeck & Ruprecht pp. 166–209.
- Lindblom, Charles Edward. 1977. Politics and markets: The world's political-economic systems. New York: Basic Books.
- Lohmann, Susanne. 1993. "A signaling model of informative and manipulative political action." American Review of Political Science 87(2):319–333.
- Lowery, David. 2007. "Why do organized interests lobby? A multi-goal, multi-context theory of lobbying." *Polity* 39(1):29–54.
- Mahoney, Christine. 2007. "Lobbying Success in the United States and the European Union." Journal of Public Policy 27(1):35–56.
- Mahoney, Christine. 2008. Brussels versus the beltway: Advocacy in the United States and the European Union. Washington, D.C.: Georgetown University Press.
- Majone, Giandomenico. 1996*a*. The European Commission as regulator. In *Regulating Europe*, ed. Giandomenico Majone. London: Routledge pp. 61–79.
- Majone, Giandomenico. 1996b. Regulating Europe. London: Routledge.
- Mayhew, David R. 1974. Congress: The electoral connection. New Haven: Yale University Press.
- Mazey, Sonia and Jeremy Richardson. 1992. "British Pressure Groups in the European Community: The Challenge of Brussels." *Parliamentary Affairs* 45(1):92–107.
- McCarthy, John D. and Mayer N. Zald. 1977. "Resource mobilization and social movements: a partial theory?" *American Journal of Sociology* 82(6):1212–1241.
- Moravcsik, Andrew. 1993. "Preferences and Power in the European Community: A Liberal Intergovernmentalist Approach." Journal of Common Market Studies 31(4):473–524.

- Moravcsik, Andrew. 1998. The Choice for Europe: Social Purpose and State Power From Rome to Maastricht. Ithaca: Cornell University Press.
- Olson, Mancur. 1965. The Logic of Collective Action: Public Goods and the Theory of Groups. Cambridge: Harvard University Press.
- Pappi, Franz U. and Christian H. C. A. Henning. 1999. "The Organization of Influence on the EC's Common Agricultural Policy: A Network Approach." *European Journal of Political Research* 36(2):257–281.
- Persson, Thomas. 2007. "Democratizing European Chemicals Policy: Do Consultations favour civil society participation?" Journal of Civil Society 3(3):223–238.
- Peterson, John. 1991. "Technology Policy in Europe: Explaining the Framework Programme and Eureka in Theory and Practice." *Journal of Common Market Studies* 29(3):269–290.
- Pollack, Mark. 1997a. The Commission as an agent. In At the heart of the Union: Studies of the European Commission, ed. Neill Nugent. Houndmills: Macmillan pp. 109–128.
- Pollack, Mark A. 1997b. "Delegation, agency, and agenda-setting in the European Community." *International Organization* 51(1):99–134.
- Pollack, Mark A. 1997c. "Representing diffuse interests in EC policy-making." Journal of European Public Policy 4(4):572–590.
- Pollack, Mark A. 2003. The engines of European integration: Delegation, agency, and agenda-setting in the EU. Oxford: Oxford University Press.
- Proksch, Sven-Oliver and Jonathan B. Slapin. 2008. WORDFISH: Scaling Software for Estimating Political Positions from Texts. Version 1.3., URL (consulted January 2009): http://www.wordfish.org.
- Proksch, Sven-Oliver and Jonathan B. Slapin. 2009. "How to avoid pitfalls in statistical analysis of political texts: The case of Germany." *German Politics* 18(3):323–344.
- Quittkat, Christine and Barbara Finke. 2008. "The EU Consultation Regime." CONNEX Report Series (5):183–222.
- Richardson, Jeremy and David Coen. 2009. Institutionalizing and managing intermediation in the EU. In *Lobbying in the European Union: Institutions, actors, and issues*, ed. David Coen and Jeremy Richardson. Oxford: Oxford University Press pp. 337–350.
- Rittberger, Berthold. 2003. "The Creation and Empowerment of the European Parliament." Journal of Common Market Studies 41(2):203–225.
- Rittberger, Berthold. 2005. Building Europe's parliament: Democratic representation beyond the nation-state. Oxford: Oxford University Press.
- Royston, Patrick. 2004. "Multiple imputation of missing values." The Stata Journal 4(3):227–241.

Rubin, Donald B. 1976. "Inference and Missing Data." Biometrika 63(3).

- Sandholtz, Wayne. 1992. "ESPRIT and the Politics of International Collective Action." Journal of Common Market Studies 30(1):1–21.
- Sandholtz, Wayne and John Zysman. 1989. "1992: Recasting the European Bargain." World Politics 42(1):95–128.
- Saurugger, Sabine. 2002. "L'expertise: une forme de participation des groupes d'intérêt au processus décisionnel communautaire." *Revue française de Science Politique* 52(4):375–401.
- Saurugger, Sabine. 2008. "Interest Groups and Democracy in the European Union." West European Politics 31(6):1274–1291.
- Schimmelfennig, Frank. 2001. "The Community Trap: Liberal Norms, Rhetorical Action, and the Eastern Enlargement of the European Union." *International Organization* 55(1):47–80.
- Schimmelfennig, Frank. 2003. The EU, NATO and the integration of Europe: Rules and rhetoric. Cambridge: Cambridge University Press.
- Schneider, Gerald and Konstantin Baltz. 2003. "The Power of Specialization: How Interest Groups Influence EU Legislation." *Rivista di Politica Economica* 93(1-2):253–283.
- Slapin, Jonathan and Sven-Oliver Proksch. 2008. "A Scaling Model for Estimating Time Series Policy Positions from Texts." American Journal of Political Science 52(8):705–722.
- Smith, Mark A. 2000. American business and political power: public opinion, elections, and democracy. Chicago: University of Chicago Press.
- Steunenberg, Bernard and Michael Kaeding. 2009. "As time goes by': Explaining the transposition of maritime directives." *European Journal of Political Research* 48(3):432–454.
- Tallberg, Jonas. 2002. "Delegation to supranational institutions: Why, how and with what competences?" West European Politics 25(1):23–46.
- Thatcher, Mark and Alec Stone-Sweet. 2002. "Theory and practice of delegation to non-majoritarian institutions." West European Politics 25(1):1–22.
- Thomson, Robert and Madeleine O. Hosli. 2006. Explaining legislative decision-making in the European Union. In *The European Union decides*, ed. Robert Thomson, Frans N. Stokman, Christopher H. Achen and Thomas König. Cambridge: Cambridge University Press pp. 1–24.
- Warleigh, Alex. 2000. "The hustle: Citizenship practice, NGOs and 'policy coalitions' in the European Union - the cases of Auto Oil, drinking water and unit pricing." *Journal* of European Public Policy 7(2):229–243.
- Woll, Cornelia. 2008. Firm interests: How governments shape business lobbying on global trade. Ithaca: Cornell University Press.

Wonka, Arndt, Frank R. Baumgartner, Christine Mahoney and Joost Berkhout. 2010. "Measuring the size of the EU interest group population." *European Union Politics* 11(3):463–476.