



# Interest groups: A survey of empirical models that try to assess their influence

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## Abstract

Substantial political power is often attributed to interest groups. The origin of this power is not quite clear, though, and the mechanisms by which influence is effectuated are not yet fully understood. The last two decades have yielded a vast number of studies which use empirical models to assess the importance of interest groups for the formation of public policy. Each of these studies yields insights on particular, confined aspects of interest group politics. To get a more complete picture of the results, however, a broad survey of the literature seems useful. It is the purpose of this paper to provide such a survey.

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## 1. Introduction

It can almost be considered a truism, that interest groups play an important role in the formation of public policy. Repeated accounts for this can be found in economics and political science literature, but also in journalistic accounts and among policy-makers. Following the early work of Bentley (1908), it was in the

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fifties that contributions from scholars like Truman (1951), Dahl (1956), and Schattschneider (1960), placed interest groups at the heart of the (American) political process. Sometimes the role of interest groups as an intermediary between citizens and government is met with approval, more often there is concern about the negative impact of interest groups on the democratic quality of government and on economic indicators like growth, inflation and unemployment. Arguments pro and con the various conceptions of 'interest groups politics' have long been based on theoretical reasoning, anecdotal evidence and casual empirics. Only in the seventies, quantitative historical records in combination with more rigorous econometric tools started to get more widely used. Since then there has been a vast literature, using empirical models to assess the influence of interest groups on public policy-making. These studies typically give insight on certain confined aspects of interest group politics. To get a more complete picture, a survey of the results obtained thus far seems useful. The present paper intends to give such a survey.

Our basic selection criterion has been that a study uses quantitative data and an empirical model to address the 'how and when' of interest group influence on public policy.<sup>1</sup> By taking such a broad (methodological) perspective, we loose much of the details and nuance of the individual studies, on both the conceptual, theoretical and methodological level.<sup>2</sup> For instance, some studies deal with organized interests, others with unorganized groups merely characterized by a common interest. Some authors derive hypotheses from underlying theoretical models, others simply refer to common sense arguments. Some use Ordinary Least Squares, others employ more refined estimation techniques. The differences in approach are often subtle and sometimes important, but we refrain from fully spelling these out. As a consequence, we will have to be somewhat vague in the use of notions like interest group, influence, and public policy. We choose to paint a rough, stylized picture, rather than being very precise (and painstakingly long) everywhere or selecting a carefully defined subfield that leaves out much material that is closely related.<sup>3</sup>

In the overview we want to focus on the studies that explicitly relate interest

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<sup>1</sup> By using this criterion, we do not mean to imply that no insight can be obtained through in-depth case-study or systematic survey. For an excellent survey study see Schlozman and Tierney (1986).

<sup>2</sup> There already are some useful surveys of the literature on interest groups. Mitchell and Munger (1991) review different schools of thought in the economics literature, Morton and Cameron (1992) give a detailed account of the theoretical models of campaign contributions, and Potters and Van Winden (1995) more generally review different theoretical approaches to the influence production process.

<sup>3</sup> For surveys with a more restricted scope see Noll (1989) who gives a detailed assessment of the 'interest group' versus the 'public interest' theory of regulation, and Swinnen and Van der Zee (1993) who review applications to the field of agricultural policy.

group variables to public policy variables. Therefore, we put ourselves some restrictions in the selection of papers and issues to be included. Firstly, we do not review studies that exclusively focus on collective action and interest group formation. These issues are addressed only if there is a direct link to public policy-making. Secondly, we focus on the explanation of public policy and leave aside studies that relate interest groups to other variables, like public opinion, economic growth or inflation. Thirdly, we refrain from summarizing normative assessments of the impact of interest groups. Some authors interpret their empirical findings as indicating that the role played by interest groups is good or bad, but we will be concentrating on the 'bare facts'. For one thing, similar empirical findings are often given quite opposite normative evaluations.

For the presentation of the material, we choose a relatively 'clean' setup. A distinction is made between activities of interest groups and structural characteristics of interest groups. The results of both types of variables, as explanatory variables for public policy, will be discussed in turn.<sup>4</sup> However, we will not give a historical ordering of the material, nor will we make subdivisions along different lines or schools of thought. We want to give a quick and efficient overview, concentrating on the empirical results as much as possible. Which issues have been much studied, which have been largely neglected? What type of data are typically being used? Where does the evidence point in one direction, where is it more equivocal? What are the main problems of empirical inquiry, and what are the perspectives for future research? It is at these questions that the survey focuses.

The organization of the paper is as follows. In Section 2 we review the empirical results on the impact of the activities and characteristics of interest groups on political decision-making. Section 3 discusses these results in a somewhat broader perspective and provides some suggestions for further research. Finally, Section 4 gives a summary of our main findings.

## **2. Interest groups. Activities, characteristics and influence**

This section gives a broad review of empirical studies that try to assess the influence of interest groups on political decision-making. To that purpose, it is useful to first give some idea of the dependent variables that are typically used in the models to be reviewed. To assess influence, generally, an equation is estimated in which the dependent variable represents a decision variable of the public sector

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<sup>4</sup> Roughly, the distinction runs parallel to the difference between structural form and reduced form estimation. In the former case, endogenous political decision variables are related to endogenous (decision) variables of interest groups. In the latter case, endogenous political decision variables are related to exogenous (characteristics) variables of interest groups.

which the interest group is hypothesized to influence. Roughly, two sets of dependent variables can be distinguished. One set concerns the behavior of individual political decision-makers. The second set relates to policy outcomes.

The empirical analysis of individual political decision-makers focuses predominantly on roll call voting by members of the U.S. Congress. Occasionally, voting in committees is considered, and only very rarely other, non-voting activities of individual legislators are analyzed.<sup>5</sup> Typically, the legislator-directed studies focus on one vote issue or a set of related issues. Popular issues for empirical inquiry are labor related issues and issues concerning industry specific regulation (like price supports, protective regulation, licensing etc.). A final feature is that, typically, cross-section data are used to compare voting by different legislators. Only rarely time series data are used to analyze changing vote patterns of individual legislators.<sup>6</sup>

The studies that focus on policy outcomes investigate the extent to which interest groups have influenced the ultimate outcome of the political decision-making process. The kind of policy variables investigated is quite diverse, ranging from state outlays on agricultural research to total federal government expenditures, and from the restrictions on trucking weights to regulated sugar prices.<sup>7</sup> Again, cross-sectional data are more often used than time series. The American situation, with a substantial number of states and significant policy freedom for the states, provides an excellent opportunity to use data of inter-state differences of both policy variables and interest group characteristics. Compared to data from samples across countries or across industries, inter-state data have the advantage of a relatively high degree of comparability. Data on inter-state differences in occupational and industrial regulation as well as social transfers have been particularly popular for empirical testing. Cross-country and cross-industry studies, on the other hand, mainly deal with protection and tax policies.

Both sets of endogenous variables are important and useful for the empirical assessment of interest group influence. Proponents of strict methodological individualism probably prefer the use of data on individual policy-makers. And, indeed, when policy outcome variables are used, the complicated issue of how to derive the aggregate policy outcome from decisions by individual legislators is usually not addressed. But even if interest groups influence the actions of individual politicians, it is still an important question whether this influence is detectable in the ultimate outcome of the political process. Moreover, even if the influence on individual politicians is hardly detectable in the data, it is still

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<sup>5</sup> See Schroedel (1986) and Wright (1990), and Hall and Wayman (1990), respectively.

<sup>6</sup> See e.g. Bronars and Lott (1994) and Grenzke (1989a).

<sup>7</sup> See Esty and Caves (1983) for a study where a set of issues is combined and weighed according to importance to a group, to allow for an simultaneous assessment of influence on a variety of policies.

possible that many small influences add up to a significant influence on the aggregate policy outcome. Influencing individual political actors is just a derived goal for interest groups. Ultimately they are interested in the outcomes of the policy process. The use of policy variables may also be useful when it is not clear which activity of a legislator is being influenced by the interest group. Apart from roll call voting, activities like lobbying among other congressmen, formulating amendments and shaping the details of bills, are crucial for determining legislative outcomes. Data on these activities are hard to come by, but interest group influence on these activities might be detectable in the aggregate policy outcomes.

In the sequel, we discuss various types of interest group related variables that have been tested on their capacity to explain political decision-making variables. A distinction is made between results that directly relate influence to political *activities* of interest groups (Section 2.1), and those that relate influence to structural and environmental *characteristics* of interest groups (Section 2.2). Contrary to the observable political activities, like lobbying and contributing to campaigns, the structural and environmental characteristics of interest groups are usually not legislator-specific. Therefore, the distinction between activities and characteristics largely runs parallel to the use of data on individual legislators and the use of data on policy outcomes, respectively. Section 2.3 summarizes the results.

### *2.1. Political activities of interest groups*

What do interest groups do to influence governmental policy? A comprehensive list would include: influencing and mobilizing the electorate, financing electoral campaigns, lobbying congress and the executive branch, and going to court. Much has been said and written about the use and relative success of each of these techniques on the basis of more or less detailed case studies, but relatively few conclusions have been based on systematic and rigorous empirical inquiry. The single most systematically studied activity of interest groups is contributing to election campaigns. This, of course, is not surprising. Campaign contributions are easily quantifiable and data on both source and target are readily available. However, as will be seen, the evidence concerning the impact of campaign contributions on politicians' behavior is fairly equivocal. The fact that there are different contribution strategies may be part of the explanation of these (mixed) results. These strategies will be discussed in the second part of this subsection. Thereafter, the empirical evidence regarding the impact of activities, other than contributing to campaigns, will be reviewed. Material is more scarce here, but there are some interesting results concerning 'lobbying'.

#### *2.1.1. Campaign contributions*

The empirical research is inspired by early theoretical papers on the investment approach to campaign contributions (Bental and Ben-Zion, 1975; Ben-Zion and

Eytan, 1974; Welch, 1974).<sup>8</sup> In this approach campaign contributions are envisaged as explicit investments to obtain favorable policy. Politicians are willing to serve an interest group's wishes (to a certain extent), and thereby willing to deviate from the policy position preferred by the voters (or themselves), because money is valuable in attracting votes. These theoretical models thus predict that campaign contributions have a discernible influence on public policy.

Empirical studies that try to determine the impact of campaign contributions on public policy typically address the question whether money – mainly donated by political action committees (PACs) – can buy a legislator's vote. Sometimes the influence of the mere act of contributing is studied, but usually the impact of the level of contributions on voting behavior is investigated. The question whether money directly influences roll call voting behavior of individual legislators is subject to extensive debate. The empirical evidence is fairly mixed. Some authors find that contributions do have significant and sometimes substantial influence on voting behavior, whereas others find moneyed influence to be moderate or even non-existing.<sup>9</sup> It does not seem useful to give an extensive presentation of the different studies, methods and results, but a representative sample may be insightful.

Silberman and Durden (1976) is one of the earliest studies that investigates the impact of campaign contributions. They find that total campaign contributions of organized labor do have significant influence on a representative's voting behavior concerning a minimum wage issue. Contributions from an opposing business group, interested to forestall increasing labor costs, also appeared to be significant but less influential. An omission of the study, however, is that it did not control for the legislator's party affiliation and thus was likely to overestimate the impact of contributions if PACs give along partisan lines (cf. Frendreis and Waterman, 1985). A usual practice is to evaluate the impact of the labor (or business) share of total contributions on voting. Significant effects of this share on various vote issues have been reported, even when it is controlled for party affiliation (e.g., Coughlin, 1985, McArthur and Marks, 1988, Peltzman, 1984).

Evidence for a limited impact of contributions on roll call voting is provided by Wright (1985). He examines five PACs of national associations which, though

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<sup>8</sup> An overview of the theoretical economics literature on interest groups is beyond the scope of this paper. For an overview along historical lines, and a discussion of the theoretical origins of much of the empirical research reviewed here, see Mitchell and Munger (1991).

<sup>9</sup> Studies belonging to the first group are, among others, Chappell (1981a), Coughlin (1985), Durden et al. (1991), Fort et al. (1993), Frendreis and Waterman (1985), Kau et al. (1982), Kau and Rubin (1981, 1993), McArthur and Marks (1988), Masters and Zardkoohi (1988), Peltzman (1984), Saltzman (1987), Silberman and Durden (1976), Stratmann (1991, 1992b, 1995a), and Wilhite and Theilmann (1987). Studies that find support for only moderate influence include Abler (1991), Bronars and Lott (1994), Chappell (1982), Grenzke (1989a), Langbein (1993), Wayman (1985), Welch (1982), Wilhite (1988) and Wright (1985).

judged to belong to the set of most influential PACs, were not able to change the voting outcome on any specific bill. Grenzke (1989a) investigates some 120 PACs, affiliated with 10 major organizations, and finds that contributions do not generally affect House members' voting patterns. Langbein (1993) studies a specific ideological issue, i.e. gun control, and finds that contributions from both proponents and opponents did not convert a legislator's opinion. The limited influence of contributions from ideological PACs on votes which are ideological in nature (e.g. abortion, homosexuality, nuclear weapons) is confirmed by Kau and Rubin (1993).

The ambiguity of results is not restricted to roll call voting. Though the number of studies is limited here, also committee voting and legislative involvement give mixed results. For instance, Wright (1990) investigates voting on two issues in the Agricultural and the Ways and Means committee, and finds little influence of contributions. Contrarily, Schroedel (1986) finds some evidence for the impact of contributions on committee voting. Hall and Wayman (1990) hypothesize that PAC money is allocated to mobilize legislative support and demobilize opposition, rather than buying votes. The goal of campaign contributions is to provide incentives for supporters to act as agents on the principals' behalf. They investigate participation of committee members on a specific issue for three different committees and find strong support for the mobilization hypothesis, but no evidence for the demobilization hypothesis.

To explain the equivocality of results, several considerations come up. Most of these relate to the type of vote issue, the type of legislator, and the type of interest group under study. Firstly, PAC influence is likely to vary with the scope and visibility (salience) of the vote issue. Issues which are not of general interest might be more easily affected. For example, the significant effect found by Stratmann (1991, 1995a) is based on a study of votes on subsidies (through price supports and quotas) to the farming sector. The issue has a narrow focus, benefits are concentrated and costs are distributed widely. Relatedly, special interest groups can be expected to be more effective when their goals and actions receive less public attention. Jones and Kaiser (1987) indeed find that under low media coverage money from union approved PACs was more important than ideology and party affiliation in explaining pro-labor voting, whereas for highly covered issues the roles are reversed. Also in Schroedel (1986) contributions appear to have a larger effect when there is low public visibility.

Moreover, it can be argued that the analysis of a specific bill or a series of individual bills might be too narrow to get an accurate reflection of interest groups' influence. Not only might the single issue be unrepresentative, interest groups are often interested in a variety of votes and buy access to support lobbying activities instead of votes. Hence, a series of bills should be analyzed as a group instead of analyzing bills as single issues to get an idea of the overall influence of interest groups on Congress. Indeed, the Wilhite and Theilmann (1987) examination of a group of labor related votes indicates that labor PACs have influenced

voting on labor legislation in general (but see Bronars and Lott (1994) for a conclusion to the contrary).

A second explanation for the mixed results is that PAC influence might also be determined by legislators' characteristics, like their need for funds. Tosini and Tower (1987) find that the percentage of campaign contributions donated by interest groups of the textile industry had a significant impact on representatives for a specific protectionist textile bill, but not on senators. An explanation could be that in the time period considered by the authors the entire House was up for reelection, whereas only one third of the Senate was in the process of campaigning. Frenreis and Waterman (1985) also provide some empirical support for the hypothesis that PAC contributions have more influence when an election draws nearer.

The third consideration concerns the strategy of the interest group under study. The activities of interest groups do not only affect legislators' positions, they are also affected by these positions. Both campaign contributions and policy decisions are endogenous variables and the relationship between them is an interdependent one. Single-equation estimation, employed in a number of (earlier) articles, may suffer from a simultaneity bias. This bias may lead to both over- and underestimation of interest group influence, depending on the strategy of the group (see Chappell, 1981a, 1982; Snyder, 1991; Stratmann, 1991, 1995a). On the one hand, if an interest group mainly donates to those legislators who already have a congruent viewpoint, then the impact of money on legislators' stand is likely to be overestimated. On the other hand, if a group mainly donates to legislators who do not take a favorable stand in the hope of swaying their position, the impact of money is more likely to be underestimated. Hence, if different groups employ different strategies, single-equation estimates may lead to mixed results. Apart from being insightful in itself, an appraisal of the contribution strategy of interest groups adds to the understanding of the (mixed) results regarding the impact of contributions on legislative behavior.

### *2.1.2. The contribution strategy*

The theoretical literature provides two competing models for the contribution strategy of interest groups (see Morton and Cameron, 1992; Potters and Van Winden, 1995; Welch, 1974). If an interest group takes the positions of candidates as given it will mainly try to get favored candidates elected and address its support and donations to 'friends', especially in those races that are expected to be close. This is the so-called position-induced or support model. If, on the other hand, a group takes the election chances of candidates as given, it will mainly try to influence the policy position of candidates, especially of those candidates which are taking a stance which is not (yet) in line with the group's preferences. This so-called service-induced or exchange model leads to the prediction that an interest group will address its money to candidates from which they are likely to get favors in return, that is, the likely winners of an election, the to be persuaded



candidates, and the candidates that are likely to be (or to become) powerful legislators.

A number of studies directly test both competing models against each other for several types of interest groups.<sup>10</sup> Other studies provide information on the determinants of donations without explicitly putting the two models to the test.<sup>11</sup> For an assessment of the contribution strategy we will use information from both types of studies. As was argued above, the important relationships are between campaign contributions, on the one hand, and the expected election outcome, the policy position of candidates and their power, on the other hand.

First, expectations regarding the election outcome are often made operational by the actual vote share in either the previous or the present election. Sometimes incumbency is taken as a proxy for electoral security. Welch (1980, 1981) is among the earlier studies. He finds that (economic) interest groups aim more money at likely winners, using a measure based on the actual vote share. There also seems to be a rather robust positive relationship between incumbency and contributions. Most of the PACs' contributions go to incumbents and not to challengers.<sup>12</sup> These results provide evidence for the exchange model. More recently, the picture has become a little more subtle. For example, Snyder (1990, 1992, 1993) finds that the contributions from economic interest groups fit the 'quid pro quo' model much better than those from ideological groups and individuals. Ideological groups are found to focus their attention on close races, hinting at a support strategy (see also Welch, 1979). What is more, a number of studies found this positive relationship between contributions and expected closeness to hold for economic interest groups as well. Jacobson (1980) provides an explanation for the latter result. Incumbents can usually get all the money they want for campaigning, and they simply want more when they are in a close race. Hence, the conjunction of these results indicates that interest groups, especially economic groups, tend to address their money to likely winners (i.e. incumbents). More money, however, is donated in races which are expected to be close.

Second, to identify a candidate's policy position, two kinds of measures are being used: first, a general measure, based on past voting records (for incumbents) and party affiliation, and, second, a more specific measure, based on the actual

<sup>10</sup> Abler (1991), Chappell (1982), Herndon (1982), Keim and Zardkoohi (1988), Langbein (1993), Maitland (1985), Saltzman (1987), Snyder (1990, 1992, 1993), Stratmann (1991, 1995b), Welch (1979, 1980, 1981, 1982), Wright (1985).

<sup>11</sup> E.g., Bennett and Loucks (1994), Endersby and Munger (1992), Gopoian (1984), Grenzke (1989a,b), Grier and Munger (1986, 1991, 1993), Grier et al. (1990), Jacobson (1980), Kau and Rubin (1993), Kau et al. (1982), Palda and Palda (1985), Poole and Romer (1985), Poole et al. (1987), Regens et al. (1991, 1994), Romer and Snyder (1994), Silberman and Yochum (1980), Stratmann (1992a, 1994, 1995a), Wilhite and Theilmann (1986a,b, 1987).

<sup>12</sup> Apart from most studies in the two previous footnotes, see e.g. Eismeier and Pollock (1986) and Schlozman and Tierney (1986).

votes of legislators on specific issues which are of interest to particular groups. Studies that use the first kind of measure obtain rather robust results. Interest groups mainly give along ideological lines, with corporate PACs donating to conservatives and labor PACs supporting liberals. Corporate PACs tend to be less partisan, though, giving to both Republicans and Democrats.<sup>13</sup> For the more specific measures, which try to identify a group's allies on particular pieces of legislation, the results are mixed.<sup>14</sup> Some claim to find evidence that economic interest groups tend to give to congressmen initially predisposed to vote in their favor, others suggest that they contribute to legislators likely to be undecided.<sup>15</sup> For ideological groups in particular, the former result seems strongest. In the gun control issue considered by Langbein (1993), for instance, the NRA and Handgun Control donated only to like-minded extremists.<sup>16</sup>

Third, the power of (prospective) legislators and their ability to supply political favors, is largely determined by their position in the legislature. Specifically, party affiliation, committee membership and seniority play a role here. Being a member of the majority party, for instance, might make it more likely that the preferred policy outcome can be provided. This may explain why corporate PACs give substantial amounts of money to (conservative) representatives from the Democratic party.<sup>17</sup> Moreover, several studies indicate that economic interest groups, in particular, tend to give more money to representatives who join important committees,<sup>18</sup> thus providing support for the exchange model. Committees largely

<sup>13</sup> See, e.g., Chappell (1982), Gopoian (1984), Grier and Munger (1986, 1991), Keim and Zardkoohi (1988), Poole and Romer (1985), Saltzman (1987), Welch (1980, 1982).

<sup>14</sup> For instance, these more specific measures obtain swing legislators on a specific issue by considering how the legislator would vote based on her or his constituency interests (Stratmann, 1992a; Welch, 1982), or the measures are based on the correlation between the estimated vote and contributions equation in a simultaneous equations model (Chappell, 1982; Stratmann, 1991).

<sup>15</sup> See, e.g., Abler (1991), Chappell (1982) and Welch (1982), and Stratmann (1991, 1992a), respectively. Welch (1982), however, does not take his results as evidence against the exchange model. He introduces the 'ex post exchange model' in which contributions are rewards for candidates' favorable past behavior, rather than a means to ingratiate with candidates who are undecided ('ex ante exchange model'). Evidently, it is hard to distinguish the ex post exchange model empirically from the support model. Stratmann (1995b) explicitly incorporates timing in the empirical analysis of PACs strategies. He argues that PACs use the timing of contributions as a tool to prevent legislators from renegeing on an implicit vote-for-contributions contract, and finds that PACs contribute to undecided legislators mainly *after* a favorable vote.

<sup>16</sup> In passing, we note that the support model, contrary to the exchange model, excludes the occurrence of 'split giving'. Langbein (1993) and Poole and Romer (1985) indeed find that contributors usually do not give to both candidates in the same race or to both sides of an issue. Scholzman and Tierney (1986), however, find split giving to occur quite often.

<sup>17</sup> All the empirical studies reviewed here relate to a time period that the Democratic party controlled the House.

<sup>18</sup> Bennett and Loucks (1994), Endersby and Munger (1992), Grenzke (1989b), Grier and Munger (1986, 1991), Munger (1989), Romer and Snyder (1994), Saltzman (1987), Stratmann (1991), Welch (1982) and Wilhite and Theilmann (1987). See Regens et al. (1991) and Wright (1985) for exceptions.

control the agenda and hence their members possess political clout on the specific jurisdiction of the committee. Interestingly, the effect of committee membership on contributions received is larger for the U.S. House of Representatives than for the Senate, where the power of committees in shaping bills is diminutive.<sup>19</sup> Finally, even though seniority is correlated with committee membership, the results seem less clear cut here. Evidence suggests that seniority is positively related to contributions from corporate PACs, but the results for labor PACs and ideological groups are more ambiguous.<sup>20</sup>

In summary, there is empirical evidence for elements from both the exchange model: contributing to secure, strong but undecided candidates, and the support model: giving in close races to like-minded candidates. However, corporate PACs appear to lean more heavily on a pragmatic exchange strategy than ideological groups.<sup>21</sup> Labor PACs seem somewhere in between.<sup>22</sup> Hence, the differences in contributing strategy can help to explain the mixed results obtained concerning the impact of money on votes (in one-equation estimation). In particular, the impact of corporate contributions is more likely to be underestimated than those of ideological PACs.

### 2.1.3. Lobbying

Studies that incorporate interest group activities other than donating to campaigns are rare. We have grouped these activities under the header ‘lobbying’, and most studies report a significant influence on policy. For example, Kau and Rubin (1979a) consider voting on five bills in the House on which two public interest lobbies explicitly endorsed a specific policy position (see also Cropper et al., 1992). They take state per capita membership as a measure of the strength of the influence activity and show that these interest groups were effective in influencing votes of representatives. Segal et al. (1992) examine senators’ vote on sixteen nominations for the U.S. Supreme Court. The number of organized interest groups presenting testimony for and against the nominee at the Judiciary Committee

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<sup>19</sup> See Grier et al. (1990) and Grier and Munger (1993). Lindsay and Maloney (1988) and Regens et al. (1991, 1994) obtain the same dissimilarity between the lower and the upper house with respect to seniority.

<sup>20</sup> See, e.g., Grier and Munger (1986, 1991, 1993), Kau et al. (1982), Kau and Rubin (1993), Keim and Zardkoohi (1988). There is also some evidence that seniority may have a non-monotonic effect on contributions received (cf. Grier and Munger, 1991; Poole and Romer, 1985; Silberman and Yochum, 1980; Wilhite and Theilmann, 1986a,b).

<sup>21</sup> It must be noted, however, that corporate PACs also differ among each other. For instance, Gopoian (1984) finds oil PACs to be more ideologically (support) oriented than defense PACs. Similarly, Clawson and Neustadt (1988) find the contribution strategy to be more pragmatic (exchange) if there is a high government involvement in the PAC’s industry.

<sup>22</sup> Explanations given in the literature for the different strategies employed by different types of interest groups include, the different goals interest groups try to pursue (e.g. Welch, 1979), the way in which they raise (financial) support from their membership (e.g. Wright, 1985), and dissimilarities in market power among interest groups (e.g. Herndon, 1982, Keim and Zardkoohi, 1988).

hearings appeared to have a profound effect. Wright (1990) investigates the influence of the number of lobbying contacts on committee voting. Questionnaires are used to identify the number of groups lobbying on each side of the issue and substantial influence is reported. Sometimes, letters, visits and phone calls are also found to have a discernible influence (Langbein, 1993). Likewise, Schneider and Naumann (1982), investigating Switzerland's direct democracy, find that the motions and applications by small and medium sized business are successful in dampening the spending increase of six out of nine items. On the other side, and to a somewhat lesser extent, farmers and trade unions seem able to further government spending. Their results suggest that influence is likely to be dependent on the issue under consideration and to vary over interest groups (see also Esty and Caves, 1983).

Some studies do not focus on a specific lobbying activity, but find a significant impact of measures of an interest group's overall lobbying activity on public policy. For instance, Hoyt and Toma (1993) find lobbying expenditures by the National Education Association to have a significant impact on the salary of teaching staff, and Leigh (1994) reports that the number of auto club lobbyists per capita had a positive effect on the number of required state-wide vehicle inspections per year. Similarly, Mixon (1995) records that the (estimated) number of registered lobbyists in an urban center significantly reduced the degree of citation, that is, the average number of days the center was in violation of carbon emissions standards.<sup>23</sup>

Just like donors, lobbyists do not only affect the positions of politicians, they are also affected by these positions. The studies mentioned above, however, all employ a single-equation technique. For a full evaluation of the results then, it is important to look at the lobbying strategies of interest groups. Similar to campaign contributions, lobbying may be aimed, either to support and encourage 'friends', or to persuade legislators who are predisposed to take a stand which is against the group's interest. If the former lobbying strategy is being used, single-equation models are likely to overestimate the impact of lobbying on a legislators stand. In case of the latter strategy, the effect of lobbying may well be underestimated.

The few studies that investigate the lobbying strategy of interest groups provide some tentative evidence that lobbying is mainly intended to alter policy positions.<sup>24</sup> Austen-Smith and Wright (1994), for instance, test a game theoretic model which may explain the number of groups lobbying senators predisposed to vote for or against the 1987 nomination of Bork for the U.S. Supreme Court. There results

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<sup>23</sup> We found only two studies that report no, or a very limited effect. Quinn and Shapiro (1991) find that the relative lobbying activity of business did not have a significant effect on tax policy, and Fowler and Shaiko (1987) report that grass roots lobbying by members of environmental groups only had a modest impact on a senator's vote.

<sup>24</sup> Interestingly, this is contrary to the conventional wisdom from the early sixties (e.g., Bauer et al., 1963; Milbrath, 1963).

indicate that groups mainly lobbied ‘unfriendly’ legislators. Friendly senators were mainly lobbied to counteract lobbies from opposing groups. This result shows that lobbying is intended to alter a legislators’ voting intentions. Similarly, Hoyt and Toma (1993) find lobbying expenditures to be higher in states where the income position of teachers is relatively bad. Evidently, too few studies exist to draw a firm conclusion, but, if anything, the one-equation results are more likely to underestimate the impact of lobbying than to overestimate it.

A final issue we briefly want to touch upon is the relation between the contribution strategy and the lobbying strategy. Wright (1990) argues that contributing and lobbying are complementary activities and have to be analyzed jointly. In his empirical analysis the number of groups lobbying appears to depend (weakly) on the number of groups contributing, suggesting that contributions may facilitate access and amplify lobbying messages.<sup>25</sup> Langbein (1993) investigates both contributions and lobbying of membership interest groups. As opposed to contributions, lobbying is less visible and can be strategically directed to opponents or pivotal legislators without antagonizing the group’s membership. Indeed, the targets of lobbying on average appear to be more moderate than those addressed by money, suggesting that lobbying is more exchange and less support oriented than contributing.

## 2.2. *Characteristics of interest groups and their environment*

When no data on interest group activity are available, the only route open is to try and relate public policy variables to structural characteristics of the interest groups (cf. the structure-performance approach in industrial organization). An important issue in this respect is whether political actions of a group have an independent role or a facilitating role in shaping public policy. In the former case both a group’s political actions and its structural characteristics independently influence policy. In the latter case, political actions are a sort of transaction cost that has to be born by the interest group in order for its favorable structural attributes to be effectuated. Under the facilitating role of political actions a group’s characteristics can be expected to serve as reasonably good instrumental variables for the group’s political activities. Of course, the relationship between public policy variables and interest group characteristics is also of interest in itself, for interest groups may exert influence without engaging in explicit political activities (cf. Lindblom, 1977).

Esty and Caves (1983) find preliminary evidence for both a facilitating and an independent role of political expenditures (on hiring lobbyists and setting up

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<sup>25</sup> Also Humphries (1991) concludes that contributions are used to support lobbying activities. He finds, *inter alia*, a positive link between the number of corporate lobbyists and the amount of money contributed to the corporate PAC. Direct evidence that money buys access, measured by the time interest groups spend with a politician, is provided by Langbein (1986).

PACs).<sup>26</sup> On the one hand, an industry's political expenditures can be explained fairly well by its structural attributes.<sup>27</sup> On the other hand, political expenditures have a significant impact on a group's political success even if it is controlled for various kinds of structural attributes of an industry. Because of the first result it seems quite possible to try and find good proxies for an interest group's political activity, when direct data on these activities are unavailable. The latter result indicates that one must keep in mind that political activities may vary over interest groups – and have an impact on policy outcomes – in a way which is not completely parallel to their structural characteristics.

Most variables included as proxies for activity relate, either to the stake of a group to influence policy, or to the free-rider problem of collective action. The results of these two measures will be reviewed first.<sup>28</sup> Then we look at variables that are not proxies for a group's activities, but may independently affect its political success. These variables include attributes of the group under study, and policy supply side variables which strengthen or weaken interest group influence on the policy process.

### *2.2.1. Stakes and collective action*

An interest group that has a large stake in influencing policy-makers and regulatory agents is hypothesized to be more politically active and hence to have a larger impact on policy. Typical variables used to measure the stake of a producer's group or industry in influencing government policies are the average size of the producers and the percentage of proprietorial income.<sup>29</sup> “The size of an average production unit, given the number of producers, is expected to have a positive effect on protection because the size of the gains per interest group member will be greater, increasing incentives for participation in pressure group activities” (Gardner, 1987, p. 305), and, “owner-farmers would tend to favor [government] investment in agricultural research more than tenant farmers, because owner-farmers would capture a larger share of the increase in the producers' surplus” (Guttman, 1978, p. 475). Another variable used to measure stakes is the degree of government involvement in an industry (Esty and Caves, 1983). The defense industry, for instance, is often thought to have a large stake to try and influence political decision-making. Also a high level of competition or import

<sup>26</sup> See also Wright (1989). He claims to find evidence that lobbying and contributions are used to reinforce the appearance of an existing organizational base, and, thus, for the facilitating role of political activities. Grenzke (1989a) raises a similar point.

<sup>27</sup> This result is fairly robust for political activity in general (cf. Grier et al., 1991, 1994; Humphries, 1991; Kennelly and Murrell, 1991; McKeown, 1994; Pittman, 1976, 1977, 1988; and Zardkoohi, 1985).

<sup>28</sup> Because these interest group variables are not legislator-specific, they are usually related to general policy outcomes and not to voting by individual legislators.

<sup>29</sup> See, e.g., Gardner (1987), Guttman (1978), Hunter and Nelson (1989), Kamath (1989), Miller (1991), Pincus (1975), Salamon and Siegfried (1977).

penetration are expected to increase an industry's demand for government intervention (Jarrell, 1978; Trefler, 1993). If competitive pressures are high and prices are low, an industry is more likely to vie for protective regulation. The stake variables mentioned are often significant and usually have the predicted sign. These results suggest that the approach to take measures of stake as a proxy for a group's political activities is a sensible one if direct data on political activities are unavailable.

A second proxy for a group's political activities is the degree to which it is able to solve the free-riding problem of collective action. If free riding is severe, political activity will be low. A distinction can be made here, between direct (or *ex post*) and indirect (or *ex ante*) measures of free riding. For ideological groups and labor unions, often a direct measure is available in the form of number or percentage of members.<sup>30</sup> Membership rates of an organized interest group are often found to be significant and to have the predicted sign. For example, Bloch (1993) finds the degree of unionization to be positively related to the support for minimum wage legislation, and Kischgassner and Pommerehne (1988) even find union membership to have a significant positive impact on government expenditure in Switzerland. Hence, a direct (*ex post*) measure, indicating that the free riding problem has in fact been solved, often has a significant effect on the possibility to achieve favorable public policy.<sup>31</sup>

There are also many interests which have no formal organization, or membership data are unavailable. In that case indirect (*ex ante*) proxies for the level of collective action have to be used, like the mere number of producers in an industry or some measure of concentration. Such indirect measures give more ambiguous results, however. Geographical concentration and concentration of sales are often hypothesized to alleviate free riding due to an increased possibility of communication and orchestration of political action. Most scholars indeed find an increased scope for political influence with higher degrees of concentration, but there are many that find no effect or even a negative effect.<sup>32</sup> Equally ambiguous are the results of the use of numbers as a proxy for the free rider effect. A large number of potential participants to collective action is usually hypothesized to increase the

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<sup>30</sup> E.g., Bloch (1993), Graddy (1991), Guttman (1978), Hird (1993), McArthur and Marks (1988), Meier (1987), Meier and McFarlane (1992), Naert (1990), Nelson and Silberberg (1987), Pashgian (1985), Peltzman (1984) and Plotnick (1986).

<sup>31</sup> A somewhat different line of inquiry relates the *number* of organized interest groups in a state or country to political variables. The general argument is that most interest groups pursue goals which give an upward pressure on legislative output (i.e. the number of bills), and the amount of public spending and taxes. For some evidence regarding this hypothesis, see Benson and Engen (1988) and Mueller and Murrell (1986).

<sup>32</sup> A positive effect of concentration is found by Esty and Caves (1983), Gardner (1987), Guttman (1980), Kalt and Zupan (1984), and Trefler (1993). Negative, ambiguous or insignificant effects are reported in Becker (1986), Cahan and Kaempfer (1992), Pincus (1975), Quinn and Shapiro (1991), and Salamon and Siegfried (1977).

free riding problem. Sometimes indeed a negative effect of numbers on influence is reported. More often, however, a positive effect is found.<sup>33</sup> Hence, there seems to be relatively little direct empirical support for the Olson (1965) influential theoretical study on collective action.

For both concentration and numbers, one could also conclude that the relationship between these proxies and the independent variables is not only driven by free-riding effects but also by effects which relate to the political strength of an interest group. For example, it is sometimes argued that a geographically dispersed industry not only has more problems of organization, but also has a leverage on a larger group of local representatives and, hence, a broader political base of support (Schonhardt-Bailey, 1991).<sup>34</sup> Similarly, large groups not only have a larger free-riding problem but also have more (electoral) resources. Probably the relationship between numbers and influence is not a linear one, and perhaps not even a monotonic one. This conclusion is supported by Guttman (1978) who finds that the effect of the number of producers on influence is more likely to be positive when a state has a relatively large number of producers. This would suggest a marginally *increasing* effect of numbers. This finding is not robust, however. Miller (1991) finds that the number of farmers has a positive impact on its influence in developed countries but a negative impact in less developed countries. With the relative number of farmers in developed countries being much smaller, this finding would suggest a marginally *decreasing* effect of numbers on influence.<sup>35</sup> Nevertheless, the conclusion remains that the relationship between numbers and influence is an intricate one, which might be non-monotonic, and which, in addition, might be dependent on the type of interest group (Van Velthoven and Van Winden, 1986).

### 2.2.2. *Political success*

Some interest groups receive a better hearing in politics than others. Moreover, a group may have more influence at one time than at another time, or book a

<sup>33</sup> For a negative effect, see Miller (1991), Plotnick (1986), Trefler (1993), Young (1991), for a positive effect, see, e.g., Abler (1991), Becker (1986), Boucher (1991), Congleton and Shugart (1990), Kristov et al. (1992), Leigh (1994), Pincus (1975), Renaud and Van Winden (1991), Stigler (1971), for ambiguous or insignificant effects, see Graddy and Nichol (1989), Michaels (1992), Neck and Schneider (1988), Nelson (1982), Renaud and Van Winden (1988), Salamon and Siegfried (1977).

<sup>34</sup> In addition, concentration may affect a group's stake in obtaining favorable policy. For instance, a highly concentrated industry may not need political assistance to secure high profits. Hence, concentration may lower the costs, but may also decrease the benefits of political action. Whether concentrated industries are more or less politically active – and, thus, which of the two effects dominates – is studied in Grier et al. (1991, 1994), Munger (1988), Pittman (1976, 1977, 1988), and Zardkoohi (1985, 1988).

<sup>35</sup> It is possible that in the case of international comparisons there are too many disturbing factors to warrant conclusions on the effect of numbers. The effect of numbers might be lower in less developed countries because of the lower democratic quality of governments in these countries or because of welfare effects (see below).



success with one policy issue but not with another. There is a wide variety of variables that figures in the empirical literature to pick up such differences in political success. Sometimes these variables are attributes of the interest group or the issue under study; often these variables refer to the political system, to the public at large, or even to the state of the economy. Though it is not a trivial task to try and classify these different variables, by and large three main groups of variables can be distinguished in the empirical literature. The first group of variables refers to the political strength of a group, the second to the presence of oppositional or coalitional (lobbying) groups, and the third to the electoral pressures on the polity.

The first group of variables can be thought of as referring to a group's political strength or leverage. Certain attributes of a group or its environment are found to affect its success in politics arena. For example, as was seen above, many authors argue that variables relating to the size of a group and its geographical dispersion make collective action more difficult. Simultaneously, these very same variables might very well be among the attributes which give a group greater leverage in politics. It is very hard to disentangle the two effects, and there seems to be no systematic evidence that one of the two effects is generally stronger, or stronger in particular cases. Equally ambiguous results are obtained for the average or relative income position of the members of an interest group. Some find a positive, others a negative effect on a group's political success.<sup>36</sup> Again, a double-tiered effect may be at work here. On the one hand, if a group's average or relative income position is bad, it has a larger stake to do something about it and it may be easier to demonstrate that political support is 'really' needed. On the other hand, if income is bad, a group may lack the resources to back up or start political activities. Also with respect to income, there is no evidence that one effect dominates the other. We shall now concentrate on some less ambiguous determinants of political success.

For producer groups some factors have been found that seem supportive of favorable government intervention.<sup>37</sup> If an industry is struck by large unemployment then this unfortunate feature clearly promotes a plea for protectionist measures. Also industries that are hurt by large duties on inputs have an easier time to get 'compensating' protection. Hence, being in need (stake!?) favors your case. What also favors the position of producers is that prices of substitutes are high. This appealing argument is brought to the fore by Beghin (1990) and can be

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<sup>36</sup> See, e.g., Kamath (1989), Trefler (1993), and Stigler (1971), and, Bullock (1992), Congleton and Shugart (1990), Gardner (1987), and Salamon and Siegfried (1977), respectively. See Cahan and Kaempfer (1992) for an insignificant effect.

<sup>37</sup> See, e.g., Beghin (1990), Boucher (1991), Cahan and Kaempfer (1992), Pincus (1975), Quinn and Shapiro (1991), Tigges and Clarke (1992), Trefler (1993).

derived from a game-theoretic model of bargaining.<sup>38</sup> He argues that producers are in a better position to bargain for high regulated prices if the outside option for consumers and government (to buy substitutes) is unfavorable. Furthermore, for non-industrial groups Plotnick (1986) finds that the 'quality' of the membership matters. Studying the inter-state differences in child-support, he finds that the level of transfers is negatively related to the percentage of non-white recipients and the percentage of mothers with illegitimate children. Having members with low social status seems to harm your case. Summarizing the findings with respect to political strength, there appears to be some indication that being in need, having a strong bargaining position, and being of high social status help to get favorable government intervention.

Second, a fairly robust finding is that a group has more political success if it is likely to encounter a (strong) coalitional force in the political arena, and, conversely, that the presence of an oppositional lobby is harmful to its case.<sup>39</sup> For instance, Teske (1991) finds that the presence of a government funded consumer advocacy harms the case of the telecommunications business. Others argue that the composition of government may provide an interest group with a coalitional force within the polity, increasing the group's political success. In this respect Graddy and Nichol (1989) report that, at the expense of the regulated health care professions, consumer interests are better served when licensing boards consist of a larger number of public members (i.e. individuals who are not members of the regulated profession). Similarly, the relative number of females in local councils appears to have a positive effect on the supply of day-care for children by municipalities, an effect found for both the Netherlands (Van Dijk et al., 1993) and Sweden (Gustafsson and Stafford, 1992). Often, however, less direct measures of opposition and support are used. Abrams and Settle (1993), for instance, find that the high rate of bank failures during the great depression resulted in pro-branching legislation. They claim that the high failure rate reduced the number – and, thus, the political power – of unit bankers opposed to branching, and lead consumers of banking services to support the pro-branching movement. Guttman (1978) counts the number of firms that produce inputs for the farmers under study and finds that the presence of many suppliers helps the farmers' case in politics. Guttman's presumption is that suppliers hope to share some of the additional rent created by the farmers' political action (see also Kamath, 1989). Esty and Caves (1983) count the number of industries that are customers of the industry under study and find that the presence of many customers is harmful for a group's case. Here the supposition is that customers fear to lose from supra-marginal prices

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<sup>38</sup> For other applications of this game theoretic model of bargaining, see Svejnar (1986), Zusman (1976), Zusman and Amiad (1977).

<sup>39</sup> See e.g., besides the studies cited in the examples, Boucher (1991), Graddy (1991), Plotnick (1986), and Stigler (1971).

created by an industry's political efforts. Less ad hoc and more convincing perhaps is the Gardner (1987) hypothesis that producers are less likely to obtain high regulated prices, the larger the burden that such prices lay on consumers (cf. the theoretical model of Becker, 1983). Gardner uses demand and supply elasticities to measure the deadweight losses of redistribution and finds these to be significant. Likewise, Globberman and Kadonaga (1994) investigate the distributive effects of telephone rate regulation across different categories of consumers, and they find evidence that higher deadweight costs of cross-subsidization reduce the level of cross-subsidies. Hence, though sometimes measured a little ad hoc, the incorporation of (potential) friends or foes is likely to improve the fit of the estimated relationship.

Now we turn to a third and final group of variables that affect a group's hearing in politics. The variables in this group all somehow relate to the electoral or democratic pressures on the polity. The general supposition is that self-interested politicians have to make a trade-off between, on the one hand, the benefits they receive from special interest groups in return for special favors, and, on the other hand, the electoral damage that may result from supplying these special favors.<sup>40</sup> Variables that affect this trade-off will thus have an impact on the amount of favors provided to special interest groups. In particular, if policy-makers are in severe electoral competition, there is less discretion to disregard voters' interests and less room to give in to demands by special interest groups. Of course, if an interest group commands considerable electoral resources, either directly or indirectly, then electoral pressure might favor a group's position (e.g., Plotnick, 1986; Stigler, 1971). For instance, we already saw that campaign contributions are found to have a stronger impact on legislative voting when an election draws near and there is increased need for campaign funds. On average, however, the literature suggests that (special) interest groups have an easier time influencing politicians which are under low democratic pressure and have considerable discretion.<sup>41</sup>

A first measure for electoral pressure is the level of inter-party competition in congress, defined as the ratio of the number of seats of the minority and the majority party. A higher level of inter-party competition is found to make legislators less apt to supply special favors. "Since greater competition expands the scope of conflict within the political system, interest group power would be checked by the need of the political parties to broaden popular support for their candidates and policies" (Young, 1991, p. 812). Second, many studies find that per capita income has a positive impact on particular government spending

<sup>40</sup> For theoretical models, see Appelbaum and Katz (1987), Bental and Ben-Zion (1975), Ben-Zion and Eytan (1974), Denzau and Munger (1986), Peltzman (1976) and Welch (1974).

<sup>41</sup> See, e.g., Abler (1991), Becker (1986), Boucher (1991), Graddy (1991), McCormick and Tollison (1981), Richardson and Munger (1990), Teske (1991), Young (1991).

categories.<sup>42</sup> Some argue that per capita income represents a measure for the opportunity costs of voters to monitor the political process and that special interest groups therefore have an easier time to vie for an increase of particular expenditures. Others, however, argue that here a demand side effect is at work, as many of these government expenditures are luxury goods to the voters. Third, equivocal results are obtained with respect to the degree of urbanization. McCormick and Tollison (1981) report a negative impact on interest group influence. They conclude that urbanization makes it easier for the public to engage in counterbalancing lobbying. Contrarily, Stigler (1971) finds a positive impact and argues that urbanization makes it easier for an interest group to solicit electoral support for its case. Finally, and less ambiguous perhaps, is the suggestion that a well-informed constituency makes congress less susceptible to the demands of special interests and more prone to serve the public interest.<sup>43</sup> Becker (1986), for instance, finds that it is harder for the dentist profession to obtain entry restrictions if a state is characterized by a well-educated electorate. Graddy and Nichol (1989) obtain the same result for registered nurses. Relatedly, as was already seen in the previous section, campaign contributions are less likely to buy a favorable legislative vote when there is high media coverage of the issues concerned. Hence, on the whole, the picture is that electoral pressure decreases politicians' susceptibility to specific demands by interest groups.

### *2.3. Summary*

There is ample evidence that interest groups affect the political decision-making process. There is substantive evidence that campaign contributions influence the behavior of legislators, though the results are not unambiguous (cf. Morton and Cameron, 1992). Some of the variation in the effect of contributions can be accounted for by the different contribution strategies pursued by interest groups. Corporate PACs seem more keen on affecting legislators' policy stand, ideologically oriented PACs tend to address their money to like-minded legislators, and labor groups are somewhere in between. Certainly, the impact of campaign contributions also varies with the characteristics of the issue under consideration. A narrow scope and low visibility seem to foster moneyed influence. This is in line with the relatively high effectiveness of lobbying activities reported, although here too few studies exist to claim robust results.

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<sup>42</sup> See, e.g., Congleton and Shugart (1990), Guttman (1978), Hoyt and Toma (1993), McCormick and Tollison (1981), Kristov et al. (1992), Mueller and Murrell (1986), Naert (1990), Plotnick (1986).

<sup>43</sup> Some indirect support for this suggestion is given by the studies that find that education increases an individual's willingness to participate in politics, both with respect to individual contributions to Congressmen (Snyder, 1993; Welch, 1981) as to membership in public interest groups (Kau and Rubin, 1979a), and studies that report a positive relationship between the level of education and the number of interest groups in a state (Benson and Engen, 1988).

When no data on activity are available, various measures of stake are often found to have a positive effect on a group's cause in the policy process. These results suggest that stake is a sensible proxy for political activity and success. The same holds for more direct measures of a group's collective action. Variables which measure a group's organized membership are often found to increase its political success. Indirect (ex ante) proxies for a group's collective action, like the number and dispersion of potential participants, give ambiguous results. Probably, the results of numbers and dispersion are driven by an intricate combination of, on the one hand, their effect on free riding, and on the other hand, their effect on the potential resources of a group and its base of political support. There does not seem to be any systematic evidence that one of the effects is stronger in general.

Three groups of variables that affect a group's political success were identified. One group of variables relates to the political leverage and strength of an interest group. It was found that political success is positively related to the 'needs' of a group, its bargaining position, and the social standing of the average member. The evidence here is rather scant, however. The two other groups of variables refer to the oppositional and coalitional forces an interest group is likely to encounter in the political arena, either organized or unorganized. The presence of strong coalitional (oppositional) force clearly seems to help (hurt) a group's case in politics. Moreover, there is evidence that a well-informed and active electorate may be among the oppositional forces of an interest group, especially in times when politicians are in great need of electoral support.

### **3. Discussion: Problems and perspectives**

In this section some qualifications are made concerning the results reviewed in the previous section. Though most of the topics we will touch upon already received some attention, here they are put in a broader perspective. The qualifications concern the simultaneity of agents' decisions in the political-economic system, the empirical analysis of the relative influence of interest groups, and the acquisition and interpretation of data and results. Together these reflections will point at some problems in the present empirical literature, and, simultaneously, point at some perspectives and suggestions for future research.

#### *3.1. Simultaneous relationships and appropriate estimation techniques*

Interest groups do not only affect public policy, their actions are also affected by policy. This simultaneity was already discussed when interest groups' political strategies were surveyed. To keep that overview well-running, some gradations related to these specific simultaneous relationships were left out. First we correct for this bias, then we proceed with some general elaborations on simultaneity.

The two competing models for the contribution strategy of interest groups

discussed in the previous section, the exchange and the support model, focus on one side of the political market. These basic models do not take explicit account of the demand for contributions by legislators. However, demand side considerations are said to be important, especially for the exchange model in which the legislator has to supply political favors or effort in return for funds.<sup>44</sup> Due to political opportunity costs, candidates may have a weak incentive to change their policy position, grant political favors or supply effort in exchange for funds. They may even refuse to accept contributions because they do not want to get committed. The demand for campaign funds is usually hypothesized to be related to the stakes candidates have in obtaining the legislative seat, to the candidate's expected probability of (re)election, and to the existence of alternative sources to foster electoral support. These variables can be related to observed campaign contributions and expenditures in order to see whether demand considerations, and not just supply considerations, play a role. We will briefly review some of the results which suggest that indeed this is the case.

The candidate's stake in obtaining the seat is typically approximated by characteristics of the political institution the candidate is running for. These characteristics include the government's budget size, the length of a politician's term, and the number of legislative seats.<sup>45</sup> Typically, a significant effect on campaign expenditures is found. For example, Crain and Tollison (1977) find a positive relationship between the length of a single office of a governor and per period campaign expenditures, and that limitations on the number of consecutive terms reduce these expenditures. Also the number of legislative seats has a negative impact of individual candidates' expenditures, allegedly due to a lower attractiveness of each individual seat (Crain et al., 1977). The demand for contributions may also depend on the candidate's perceived (re)election chances. It is typically hypothesized that incumbents solicit more contributions when their opponent is better funded and when they expect a close race. Indeed, empirical evidence suggests that total contributions received by the challenger and the closeness of the election are significant positive determinants of the contributions received by the incumbent.<sup>46</sup> Similarly, Abrams (1981) finds that gubernatorial races with no substantial inter-party competition are less costly. Finally, the demand for contributions could be related to the availability of alternative sources to obtain voter support. For example, in Lott (1987b) the incumbent's tenure, measuring the period of free media coverage, appears to act as a substitute for campaigning in building up a political 'brand name'. Also, some candidates have

<sup>44</sup> See, e.g., Giertz and Sullivan (1977), Palda (1992), Silberman and Yochum (1980), and Wilhite and Theilmann (1986a,b). Snyder (1990, 1993) finds some evidence to the contrary, though.

<sup>45</sup> See Abrams (1981), Abrams and Settle (1978), Crain et al. (1977), Crain and Tollison (1976, 1977), Gifford and Santoni (1978), Palda (1992).

<sup>46</sup> See Jacobson (1980), Kau et al. (1982), Kau and Rubin (1993), Wilhite (1988), Wilhite and Theilmann (1987), and most of the studies mentioned in footnotes 9 and 10 respectively.

own funds or party funds for campaigning. These funds, however, can have both a negative and a positive effect on PAC contributions. Some find that own funds are a substitute for PAC money (cf. Silberman and Yochum, 1980), others find a positive relationship (e.g., Keim and Zardkoohi, 1988). The latter result may indicate that PAC money and party funds are complements in the production of votes (demand effect), but it might also be the case that party funds serve as ‘seed money’ to establish credibility among PACs (supply effect).

The observed campaign contributions to candidates are the outcome of both demand and supply considerations. When demand considerations are incorporated, it becomes more difficult to distinguish competing models for interest groups’ contributions strategies empirically.<sup>47</sup> This is caused by the fact that demand and supply considerations may be in conflict. Take, for instance, the expected probability of (re)election. On the one hand, interest groups may be willing to offer more money to secure candidates (exchange model). On the other hand, a secure candidate may demand fewer contributions and be less inclined to supply favors in return. The exchange model in which demand considerations are accounted for is compatible then with both larger and smaller contributions to likely winners, and, thus, hard to distinguish empirically from the support model.<sup>48</sup> This problem is partly caused by the fact that notions like willingness and ability to supply favors are difficult to make operational, but also by the lack of theoretical models which yield clear cut competing hypotheses.

Generally speaking, the importance of both demand and supply considerations for the actual public policy outcome is a consequence of the simultaneous relationships between the actors in the political system. When a single equation is estimated to determine the influence of an interest group’s activity on public policy, an assumed equilibrium equation instead of a structural relationship is estimated. That is, the equation does not represent a public policy production function and the estimated coefficient on the group’s activity cannot be interpreted as the marginal product of the activity on public policy. When the coefficient is interpreted in such a way, though, simultaneity bias might result. Moreover, the analysis of assumed equilibrium equations does not give much insight in the underlying structural relationships, since demand and supply influences are usually hard to disentangle. An assumed equilibrium equation might be compatible with different kinds of structural relationships (cf. the identification problem). For example, when one observes that the interest group’s position and the legislator’s

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<sup>47</sup> The models are even more difficult to distinguish empirically when one introduces dynamics and an ongoing relationship between contributors and legislators.

<sup>48</sup> To provide an example, Welch (1982) finds a negative relationship between expected vote percentage and contributions received and takes this as support for the exchange model. He argues that the exchange model predicts that, though the largest gifts go to likely winners they do not go to sure winners who are not appreciative of the gift’s size. He notes that the result also endorses the support model.

position coincide at the end of the policy-making process, it might be the case that the interest group addressed its action at friends, or that the interest group swayed the opinion of the legislator (cf. Snyder, 1991).

Empirical studies should recognize the reciprocal causation between agents' decisions and employ an appropriate estimation technique when estimating (assumed) structural equations. The methodological problems observed are typically more prominent in the earlier studies. As the number of empirical studies expands over time, substantial attention is being paid to the importance of using the appropriate econometric methods. Future studies should also employ these methods. Some authors recommend to analyse a more complete political system when investigating the determinants of public policy. For example, Kau et al. (1982) estimate a system of structural equations which includes legislators, interest groups and voters. Others, referring to the identification problem, doubt whether estimation of structural relationships in the political system is possible at all.<sup>49</sup> Without taking sides, we believe that estimated (structural or equilibrium) equations should preferably be based on assumptions about underlying preferences of agents and relationships between the agents. Without sufficient theoretical underpinning the empirical model becomes rather ad hoc and the estimated equations may fail to have a clear cut interpretation.<sup>50</sup>

### *3.2. The relative influence of interest groups*

The review in Section 2 mainly analyzed interest groups in isolation. The relationship with other interest groups and unorganized interests was only briefly mentioned. It appeared that the presence of an opposing interest group or a well-informed electorate reduces the influence of the interest group under study. These results harmonize with the general presumption that public policy is the outcome of a trade-off between several interests in society. However, the results do not indicate the relative importance of these several interests. They do not provide a complete answer to the question whether interest groups are one of the major determinants of public policy or whether their influence is relatively minor. For an assessment of interest groups' relative influence the query for the relevant model of the principle determinants of public policy becomes important.

Often, the interaction between a legislator and the private sector in a representative democracy is envisaged as a principal-agent relationship in which the legislator-agent wants to get reelected by the constituents—principals (Barro, 1973). When voters are completely informed and can punish legislators immediately, congressmen should vote as their constituency desires. Political power or

<sup>49</sup> Giertz and Sullivan (1977), Jacobson (1985), Snyder (1990).

<sup>50</sup> See, e.g., Austen-Smith and Wright (1994), Beghin (1990) and Snyder (1990) for nice illustrations of the assistance of a theoretical model in deriving (non-trivial) empirical hypotheses.



influence of interest groups, other than electoral influence, does not exist. In reality, individual voters cannot monitor politicians costlessly and uncertainty exists about the effects of policy decisions. This introduces some slack in control of legislators and might result in some room for discretionary behavior.<sup>51</sup> This may lead to influence by special interest groups, or to legislators pursuing other narrow personal goals alongside just reelection. The influence of interest groups on a legislator's behavior is thus constrained by the preferences of his constituency. In order to establish the relative influence of interest groups it is then important to establish the preferences of the constituency and their impact on the legislator's behavior. When, for instance, the interests of the constituency and the interests of a specific interest group are largely aligned, the observation that the legislator behaves in the group's interests does not directly indicate the group's influence. Moreover, since constituency preferences constrain the legislator, they also affect the interest group's strategy in influencing the political process.<sup>52</sup>

The determination of constituency preferences is not without problems, however. Most empirical studies use relatively broad demographic and socioeconomic measures, like per capita income, education, race, religion, degree of urbanization and unemployment. Hence, the relevant economic and ideological interests the legislator or polity is supposed to represent are just approximated by the average characteristics of the district. In fact, these studies implicitly assume, when interpreted in the framework of the principal-agent model, the mean (median) voter to be the relevant principal for the legislator-agent. However, this assumption is difficult to reconcile with the observed fact that U.S. senators from the same state possess substantially different voting records (Higgs, 1989, Jung et al., 1994). The characteristics of the entire constituency seem to be too general to be an adequate approximation of the specific part of the constituency the congressman tries to represent (cf. Noll, 1989). This point is elaborated empirically by a number of authors who all emphasize the importance of distinguishing between the geographical and the (re)election constituency.<sup>53</sup> Although Poole and Romer (1993) agree with this distinction, they notify that there is a danger of "running into a tautology if we say that, by definition, a legislator is serving his election constituency". Such an approach puts too much emphasis on elections as means of

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<sup>51</sup> The extent to which the legislator might shirk, by not voting in accordance with the preferences of the constituency, is also related to the specific characteristics of the institution under consideration. Some evidence for this is found by Richardson and Munger (1990). Their results indicate that House members closely serve the relevant constituency, whereas senators follow more strongly their own judgement. Zupan (1989) finds evidence to the contrary, though.

<sup>52</sup> A number of authors for instance, emphasize the impact of constituency preferences on the supply price of legislator's services and hence on interest groups' strategies (Endersby and Munger, 1992, Grier and Munger, 1986, 1991, Stratmann, 1992a, 1994).

<sup>53</sup> Studies that are particular focused on this point are, among others, Bender (1994), Fort et al. (1993), Goff and Grier (1993), Jung et al. (1994), Krehbiel (1993), Peltzman (1984), Richardson and Munger (1990) and Stratmann (1994).

influencing public policy and is likely to underestimate the influence of special interest groups.<sup>54</sup> As argued, the pattern of constituents' preference representation is important for the relative influence of interest groups on the political process. An important question to answer is, thus, whether there is "a theoretically correct, operationally possible method of measuring constituent interest" (Grier, 1993). Only when this problem is satisfactorily addressed the extent to which legislators shirk at the constituents' expense by giving in to demand of special interest groups can be answered.

The same problem harasses another strand of literature that tries to assess the extent to which legislators shirk by pursuing their personal goals (others than just reelection), especially by pushing their own ideology (i.e. their intrinsic valuation of policy outcomes).<sup>55</sup> This literature is also of importance for the relative influence of interest groups. When a legislator's personal goals are one of the principle determinants of public policy, the relative influence of special interest groups may be smaller.<sup>56</sup> On the other hand, when there is (no) room for legislators to shirk by pursuing their own goals, there is also (no) room for legislators to give in to the demand of special interest groups. From this broader perspective, the ideology literature and the literature on interest group influence are connected (cf. Bronars and Lott, 1994).

For the (relative) influence of interest groups two interrelated issues, extensively debated in the ideology literature, are of interest. The first concerns the

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<sup>54</sup> The introduction of the reelection constituency also blurs the distinction between constituents and interest groups. Some authors distinguish special interest groups from the reelection constituency, others incorporate these groups into a legislator's constituency. For example, Kau and Rubin (1993) view voting in response to contributions from special moneyed interests as shirking at the constituents' expense, whereas Fort et al. (1993) take PACs as part of a legislator's constituency.

<sup>55</sup> Legislator's pursuit of own goals other than ideology are only rarely considered. Exceptions are Chappell (1981b), who finds that personal financial holdings of congressmen are unimportant in determining policy decisions, and Bender (1988, 1991), who reports that the implied change in reelection probability does affect a legislator's vote on campaign finance reform legislation. Relatedly, Thorbecke and Matzelevich (1995) find that representatives who manage their personal finances badly tend to vote in a fiscally irresponsible manner, and they take this as evidence for nonideological shirking by legislators. Other empirical studies treat groups of legislators as interest groups in their own right. Abrams and Settle (1978), for instance, find that Democrats vote significantly different from Republicans on public financing of presidential elections, legislation which would be beneficial to the Democratic party. Lindsay and Maloney (1988) envisage political parties as cartels on the supply side of legislation (to obtain a higher price from interest groups), and they report some empirical evidence consistent with this view. Others treat all incumbent politicians as an interest group and investigate whether incumbents try to restrict entry from new entrants – either by reducing competition between them through geographical segmentation of the political market (Crain, 1977), or by adopting campaign spending regulation detrimental to challengers (Palda, 1994, Palda and Palda, 1985, 1994) –, try to obtain higher wages (McCormick and Tollison, 1978) or, third, try to regulate lobbyists in such a way as to benefit those in the legislature (Brinig et al., 1993).

<sup>56</sup> The influence of interest groups may also become larger in this case, for instance when legislators try to obtain bribes from interest groups in return for favorable policy.

measurement of a legislator's ideology and its influence on his voting behavior. Many studies measure a legislator's ideology through interest group ratings based on a bundle of past votes, and a number of them find a significant impact. But, since observed voting behavior is not guided solely by the legislator's own ideology, the interest group ratings also represent constituents' (and interest groups') interests. Peltzman (1984) even argues that these ideology variables just serve as useful proxies for the economic characteristics of the (re)election constituency. A number of studies recognize the inadequacy of the interest group ratings and employ a residualization technique to purify the purported ideology indicator from constituents' interests. In a second step, the influence of this residual measure is determined and usually found to be significant (e.g. Carson and Oppenheimer, 1984). However, this methodology has raised a lot of criticism as well.<sup>57</sup>

The second issue of interest involves the interpretation of ideologically based voting. Some authors, guided by the results indicating that the degree of ideologically based voting is inversely related to the constituents' slack in control and the legislator's political opportunity costs,<sup>58</sup> interpret it as legislator's shirking. Contrarily, others argue that ideologically based voting provides a mechanism by which shirking is controlled. This interpretation rests on the idea that the political market naturally selects legislators over time (Lott, 1987a; Lott and Reed, 1989).<sup>59</sup> Legislators signal with their past voting behavior that they are ideologues, and true ideologues can provide this signal at a much lower cost. Competition between legislators, then, will efficiently sort the political market. Some evidence suggest that legislators do not alter their voting behavior in their last term, supporting the sorting model, and sorting to operate very effectively.<sup>60</sup> The ideological sorting model is incompatible with a strong influence of special interest groups at the constituent's expense (cf. Bronars and Lott, 1994).

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<sup>57</sup> See Bender (1994), Jackson and Kingdon (1992), Lott and Davis (1992), and Segal et al. (1992). In particular, by employing the two stage procedure the impact of ideology is likely to be overstated and, thus, the impact of other factors (interest groups) is likely to be underestimated.

<sup>58</sup> Some studies obtain this result by considering cost differences among several issues (e.g. Nelson and Silverberg, 1987, Peltzman, 1984), other studies focus on differences in opportunity costs among legislators typically caused by reelection considerations (e.g. Bender, 1991, Davis and Porter, 1989, Kalt and Zupan, 1984, 1990, McArthur and Marks, 1988, Tosini and Tower, 1987).

<sup>59</sup> An alternative explanation to justify the second interpretation entails that ideology may serve as a cheap summary indicator to provide the constituents with information about the legislator's policy position (Peltzman, 1984). Dougan and Munger (1989) provide some empirical evidence for incumbents having an incentive to invest in brand name capital by maintaining a consistent voting record, but see Lott and Davis (1992) for a critique.

<sup>60</sup> See Lott (1987a), Lott and Bronars (1993), Poole and Romer (1993) and Van Beek (1991), and, Kau and Rubin (1993), Lott and Davis (1992), and Wright (1993), respectively. Although other studies claim to find some evidence that legislators do alter their voting behavior in their last term, they still argue that sorting takes place (Carey, 1994, Zupan, 1990). Besides, the evidence provided by Zupan (1990) for legislators' altering behavior in the last term is strongly criticized by Van Beek (1991).

The discussion above makes clear that it is extremely difficult to order the several determinants of public policy according to their relative importance. It seems almost impossible to infer whether voters (the public at large), politicians or special interest groups are the most influential. An assessment of interest groups' relative influence becomes even more difficult when one acknowledges the possibilities of cooperation between agents in the political system. The possibility of vote trading (logrolling) among legislators may obscure the actual influence of interest groups.<sup>61</sup> Likewise, interest groups may cooperate at certain instances in order to increase their influence, and the pattern of cooperation may depend on the issues involved.<sup>62</sup> A final complication is that interest groups may direct their activities at the constituents in trying to influence public policy indirectly. For instance, Schneider and Naumann (1982) find that the recommendations of interest groups sometimes had a significant influence on voters in Swiss referenda.<sup>63</sup>

Public policy is the outcome of a complicated process with several actors who all influence the final outcome, either directly or indirectly. The influence of one specific group of actors, i.e. interest groups, depends on these complicated processes and the influence of other actors. Often, empirical results can be interpreted in several ways and explained by different factors. This is illustrated by the frequent statement in the formulation of hypotheses that the sign of a particular coefficient can be positive or negative for different reasons. In order to avoid this multiplicity of possible interpretations, competing hypotheses should be derived from underlying theoretical models. Theory can guide the analysis by structuring the search for new empirical material and providing a base for coherence and embeddedness. This may not be easy, as sometimes such theory is (still) lacking.

### *3.3. Data problems*

As with any empirical inquiry, lack of data constrains the assessment of the influence of interest groups on public policy in important ways. Two interrelated problems, in particular, are worthy of some consideration. The first relates to the frequent use of proxies for the relevant but unobservable quantities. The second problem concerns the limited scope of the empirical analyses and, hence, the question of generalizability.

A typical, and often the only possible, solution to the lack of data is the use of instrumental variables as proxies for the unknown quantity. Unfortunately, the use of proxies often leads to problems of interpretation. This was already clear in Section 2.2 where we surveyed the empirical results of studies that used proxies for the activities of interest groups. As argued, these proxies are related to the

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<sup>61</sup> See Kau and Rubin (1978, 1979b), and Stratmann (1991, 1992b).

<sup>62</sup> See, e.g., Masters and Zardkoohi (1988), Salisbury et al. (1987).

<sup>63</sup> Lupia (1994) and Rapoport et al. (1991) also find that interest group endorsements may affect voters.

group's stake, the free-rider problem of collective action and the political success of the group. Usually, a proxy incorporates more than one of these aspects. Examples given in the previous section concern, among others, the number and dispersion of potential participants which both represent free-riding effects and political strength. Just to give another example, consider a legislator's party affiliation. Some view party affiliation as a measure of constituency preferences, some as a measure of a candidate's ideology, some as a measure of a legislator's stand used to identify a group's political friends, and others as an indicator of a candidate's power (membership of the majority party). Due to the latter two interpretations, for instance, the fact that labor groups mainly donate to Democratic representatives may be taken as evidence for both the support and the exchange model.<sup>64</sup>

To find satisfactory and unambiguous proxies is a difficult task. Sometimes, creativity and the use of supplementary information from various sources can alleviate the problem. For example, when assessing the strategy of interest groups, we in fact need information on a politician's stand *before* the interest group became active. Austen-Smith and Wright (1994) make use of a headcount by the American Conservative Union prior to the 1987 confirmation vote on Bork's nomination, to assess the expected vote of senators before the onset of any lobbying. In addition, they use data collected by Caldeira and Wright (1989) through direct mail and personal interviewing, to get information on the positions of some 468 organizations and their lobbying efforts. Also experimental techniques can provide useful information. For instance, Cover and Brumberg (1982) set up a clever field experiment to assess the impact of the so-called 'franking privilege' on incumbents' popularity lead over challengers prior to any campaign expenditures.<sup>65</sup>

A second, and probably more severe problem, is that the empirical studies surveyed have a rather restricted scope in a number of respects. Firstly, partly as a consequence of the convenient possibility of interstate comparison, most empirical studies are directed to the American situation. Relatively few empirical results exist for the influence of interest groups on public policy for countries outside the United States.<sup>66</sup> Consequently, the empirical studies are biased towards a particu-

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<sup>64</sup> The recent (November 1994) electoral landslide in the U.S., giving Republicans a majority in the House, yields a fresh opportunity to test whether labor groups use a support (only Democrats) or an exchange (Democrats and Republicans) strategy.

<sup>65</sup> Even laboratory experiments can be a useful source of additional information. For example, Potters (1992) provides experimental evidence that lobbying is more likely to be addressed to 'marginal' targets who just need a small additional push.

<sup>66</sup> Some exceptions are Naert (1990) for Belgium, Guttman (1980) and Kamath (1989) for India, Zusman (1976) and Zusman and Amiad (1977) for Israel, Renaud and Van Winden (1988, 1991), and Van Velthoven and Van Winden (1986) for the Netherlands, Schneider and Naumann (1982) and Kischgassner and Pommerehne (1988) for Switzerland, and Beghin and Kherallah (1994), Gliberman and Kadonaga (1994), Kristov et al. (1992) and Miller (1991) for cross-country analysis.

lar political system and it is questionable whether the results can be generalized to other countries.<sup>67</sup> Secondly, with respect to the activities by interest groups there is a strong concentration on campaign contributions, leading to a bias towards one specific means of influence. A priori there is no reason to assume this activity to be representative for other channels of influence, or for the interest group's total package of instruments (cf. Grenzke, 1989a). As discussed in the previous section, there is some preliminary evidence that the impact of activities like lobbying are not unlikely to have a stronger effect (on legislators). Similarly, there is some tentative evidence for interest groups' contributing strategies to differ from their lobbying strategies, and for some interaction (complementarity) between these two means of influence. Thirdly, the analysis of the impact of interest group actions is largely concentrated on legislative voting. However, also non-voting activities, like making up the details of bills, lobbying among fellow congressmen and handing in amendments, are crucial in determining legislative outcomes. Schlozman and Tierney (1986) even argue that frequently a legislator's non-voting activities are at odds with the direction of her or his vote on the floor.<sup>68</sup> Fourthly, most empirical studies are concerned with narrow policy areas. Only the success or failure of an interest group in influencing policy in one particular area is evaluated, but an interest group may well try to affect policy concerning a variety of issues. Fifthly, there are hardly any studies that deal with targets of interest group activity other than legislators.<sup>69</sup> Of course, the studies reviewed in Section 2.2 relate interest group characteristics to general policy outcomes, but these studies do not give information on how influence on policy outcomes is effectuated. Empirical material, for instance, on the direct interactions between interest groups and members of the executive branch is almost completely lacking (for an exception see Boucher (1991)).<sup>70</sup> Finally, though many argue that dynamics are important, most studies investigate the influence of interest groups in a static framework. Interest groups and the polity interact repeatedly and notions like

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<sup>67</sup> Some evidence that political institutions matter for the influence of interest groups is provided by Beghin and Kherallah (1994). In their cross-country analysis they distinguish four political systems – multi-party (pluralism), dominant party, one party and no party systems, respectively – and find that the level of agricultural protection is highest for dominant party systems. Further democratization to a complete pluralistic system does not increase agricultural assistance.

<sup>68</sup> Uri and Mixon (1980) raise a similar point. They observe that legislators vote differently on amendments to the 1977 minimum wage bill as compared to their voting behavior on the final vote. They argue that by voting differently on amendments, the legislator can appeal to several subgroups of his constituency simultaneously.

<sup>69</sup> However, for an excellent analysis of the impact of organized interests on the U.S. Supreme Court, see Caldeira and Wright (1988).

<sup>70</sup> On the other hand, quite a number of studies try to assess the political influence of the bureaucrats as an interest group in itself, see e.g. Dilorenzo (1981), Meier (1987), Neck and Schneider (1988) and Renaud and Van Winden (1988, 1991).

reputation and credibility matter in developing and maintaining long term relationships.<sup>71</sup>

Perhaps, the largest progress in the study of interest group influence could be made by broadening the scope of systematic empirical inquiry.

#### **4. Conclusion**

It is generally believed that interest groups carry much weight with the determination of public policy. The empirical results reviewed and discussed in Section 2 provide us with more tangible evidence for the influence of interest groups on policy outcomes. Even though on a number of accounts equivocal results are obtained, it seems justified to present the following ‘stylized facts’ (cf. the summary given in Section 2.3):

1. Campaign contributions and lobbying alter a legislator’s (voting) behavior, particularly, with respect to bills with a narrow focus and low public visibility.
2. The strategy of ideological groups is oriented towards supporting like-minded legislators; corporate groups are more aimed to change legislators’ positions; labor groups employ an intermediate strategy.
3. The larger the organized membership of an interest group, the larger its political influence will be.
4. A group’s stake in influencing public policy is a positive determinant of both its political activity and its success.
5. The relation between the number of potential participants of collective action and influence on policy outcomes is an intricate one, driven by both free-riding effects and effects on the group’s (electoral) resources. The same holds for measures of concentration.
6. The presence of an oppositional (coalitional) force in the political arena hurts (helps) a group’s case in politics.
7. Strong electoral pressures on the polity and the presence of a well-informed electorate, lower the influence of special interest groups.

Furthermore, our discussion – given in Section 3 – demonstrates that it is important to recognize the simultaneous and mutual relations between interest groups, legislators and voters, and to employ appropriate estimation techniques to account for this interdependence. Also, empirical analysis should preferably be guided by theoretical models to allow for the derivation of clearcut hypotheses, unambiguous interpretation and a base for embeddedness. Fortunately, an increasing appreciation of this is displayed in the more recent contributions to the literature.

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<sup>71</sup> Snyder (1992) incorporates dynamic aspects when investigating interest groups’ contributing strategies and finds that long-term considerations are in fact important for (economic) interest groups.

A subject of inquiry which is still awaiting progress, is the assessment of the influence of interest groups relative to the influence of other factors, like the interests of voters and policy-makers. As of yet, conceptual and theoretical problems have hindered such an assessment. Finally, we believe that the empirical literature could benefit greatly by broadening its database, to include more countries, a larger variety in the means of influence employed by interest groups, and to account for the dynamic aspects in the relationship between interest groups and the polity.

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