Voting Against Your Constituents? How Lobbying Affects Representation

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Citizens delegate the representation of their political preferences to members of Parliament (MPs), who are supposed to represent their interests in the legislature. However, MPs are exposed to a variety of interest groups seeking to influence their voting behavior. We argue that interest groups influence how MPs cast their vote in Parliament, but that this effect varies across groups. While lobbying by sectional groups provides incentives for MPs to defect from their constituents, we expect that cause groups in fact strengthen the link between MPs and their voters. We test our argument based on an innovative study of 118 Swiss public referenda, which allows for directly comparing voter preferences with legislative voting of 448 MPs on these issues. Drawing on a multilevel regression analysis, this study shows that interest groups considerably affect the link between MPs and their voters. Our findings have important implications for our understanding of political representation.

Do members of Parliament (MPs) listen to their voters? A crucial element of political representation in democracies is that there is a link between citizens and the candidates they have voted into Parliament. Powell (2000, 2004) has accordingly made a distinction between procedural and substantive representation. Procedural representation refers to the link between the votes that citizens have cast in elections and the distribution of seats in Parliament. Substantive representation, moreover, requires that there is a link between the preferences of citizens and the policies enacted by their representatives. According to Miller and Stokes (1963), it is not enough that citizens' votes translate into seats in the legislature, but it is also important that legislative representatives act in line with the preferences of their voters. As Powell (2004, 274) puts it, "democratic representation means that citizens' issue preferences should correspond to the positions or behavior of their representatives." This study therefore examines to what extent members of Parliament behave in line with the preferences of their voters.

While members of Parliament have strong incentives to please their voters in order to be reelected, they are also exposed to a wide variety of interest groups that seek to influence the policy decisions of legislative representatives. Interest groups represent special interests in a society and lobby MPs to cast votes in Parliament in their favor to achieve a policy outcome that is as close as possible to their ideal point. Recent empirical studies have made considerable efforts to empirically examine the influence that interest groups exert on the outcome of legislative debates (e.g., Baumgartner et al. 2009; Dür and De Bièvre 2007; Klüver 2013; Mahoney 2008). However, the interest group literature is characterized by contradictory findings. A prominent claim in interest group research refers to the business bias of public policymaking, which Schattschneider (1960, 35) famously criticized by pointing out that "the flaw in the pluralist heaven is that the heavenly chorus sings with a strong upper-class accent." However, while Yackee and Yackee (2006) and Dür and De Bièvre (2007), for instance, indeed find empirical support for such a business bias, many other studies show

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that there are no systematic differences between business groups and other types of organized interests in terms of shaping policy outcomes (e.g., Bernhagen 2012; Klüver 2012; Mahoney 2008).

Contradictory findings in the interest group literature are to a large degree caused by methodological difficulties in measuring the impact of interest groups (for reviews, see, e.g. Baumgartner and Leech 1998; Dür 2008; Hojnacki et al. 2012; Lowery 2013; Smith 1995). This is particularly the case for empirical research investigating the impact of interest groups on voting behavior of legislative representatives in Parliament. While some studies have found that interest groups were able to influence voting behavior of MPs in the legislature (e.g., Fellowes and Wolf 2004; Frendreis and Waterman 1985; Langbein and Lotwis 1990; Stratmann 1991, 1995; Wilhite and Thielman 1987), others have arrived at the opposite conclusion (e.g., Bronars and Lott 1997; Grenzke 1989; Wawro 2001; Wright 1985).

An important methodological shortcoming of prior research on interest group influence on MP voting behavior is the measurement of constituency preferences. In order to assess whether members of Parliament have cast legislative votes in line with the preferences of their voters, it is crucial to measure the position of an MP's constituents with regard to a specific policy proposal and to compare it with the legislative vote cast by the MP. Existing studies either entirely omit constituency preferences (e.g., Rothenberg 1992; Segal, Cameron, and Cover 1992; Wright 1990) or they use demographic or economic variables to operationalize voter preferences, such as unemployment rates, industry density or previous election results (e.g., Fellowes and Wolf 2004; Gordon 2001; Stratmann 1996; Wawro 2001; Witko 2006; Wright 1990). These demographic and economic district-level characteristics are only very crude proxies for voter preferences regarding specific policy proposals, which result in a considerable degree of measurement error (see also Smith 1995, 109).

In this study, we propose a novel methodological approach to empirically assess the impact of interest groups on voting behavior of legislative representatives in Parliament. We draw on a unique data set that allows for directly comparing voter preferences on a specific proposal with the legislative votes cast by their MPs on precisely the same proposal in the national legislature. In order to accomplish this task, we make use of a unique feature of the Swiss political system in which a considerable number of legislative proposals are at the same time subject to public referenda and to legislative voting in Parliament so that we can empirically assess whether MPs voted in line with their constituency interests. We analyze 118 policy proposals, which is to our knowledge the most extensive empirical study on interest group influence on voting behavior of MPs to date (see also Witko 2006, 284). The empirical analysis indicates that interest group pressure indeed has an effect on legislative votes in Parliament. MPs who have strong ties with sectional interest groups are considerably more likely to defect from the preferences of their voters, whereas MP ties to cause groups strengthen the electoral link between voters and their representatives.

Interest Groups and Parliamentary Votes

In this section, we will explain our theoretical argument in detail. We begin by specifying our theoretical assumptions about the underlying motivation for MP behavior. We then explain the principal-agent relationship between MPs, voters, and political parties to understand how interest groups can affect the behavior of legislators *directly* through lobbying MPs and *indirectly* through lobbying their political parties. Finally, we will discuss the incentives that MPs face to cast their legislative votes in line with interest group demands and why we expect a differential effect on MP defection depending on which type of interest groups lobby MPs.

MPs as Agents of Two Principals

We assume that MPs are rational, goal-oriented, and purposeful actors who aim to maximize the achievement of their preferences (Downs 1957). Following Riker (1962), we furthermore assume that members of Parliament are primarily office-seeking actors. MPs strive first and foremost for reelection and therefore select those courses of action that increase the probability of being reelected.

MPs can be conceptualized as agents of two different principals. On the one hand, MPs are accountable to voters. Following Powell (2004), we regard citizens as principals who temporarily delegate the power to make public policies on their behalf to legislative representatives who act as the citizens' agents. Citizens are expected to hold their legislator accountable. If a legislator were to drift too far from the preferences of her constituents, voters can punish that MP at the polls. MPs therefore have strong incentives to please their voters. Accordingly, there is ample evidence that MPs cast votes in Parliament in line with the preferences of their constituents (e.g., Ansolabehere, Snyder, and Stewart 2001; Clinton 2006; Kam 2008).

On the other hand, MPs are also accountable to their political parties. In many electoral systems, voters do not

select individual candidates in elections, but instead vote for entire party lists. Political parties are in charge of drafting these lists and therefore control candidate selection (Hix 2002). What is more, political parties can also shape the voting behavior of their representatives in the legislature as they control many of the benefits that come with a parliamentary mandate, such as assigning attractive committee positions or rapporteurships (e.g., Cox and McCubbins 1993; Sieberer 2006; Weingast and Marshall 1988). As a result, MPs are not only accountable to voters, but they are also responsive to their parties.

Legislators and Interest Groups

Hence, we conceive of MPs as office-seeking actors who primarily strive for reelection. They act as agents of two different principals, namely, their voters and their political party, which they have to please to ensure their reelection. However, voters and political parties are not the only important actors that exert influence on legislators. Members of Parliament are additionally exposed to a wide variety of interest groups that seek to influence their legislative votes (for a review, see Smith 1995). Interest groups try to affect public policymaking by engaging in a variety of different lobbying strategies. The general aim is to shape policy decisions in their favor by seeking influence on individual MPs or party groups so that they cast legislative votes in line with the policy preferences of interest groups.

Why should MPs listen to interest groups? In order to understand how interest group lobbying might affect the voting behavior of MPs, one can conceive of lobbying as an exchange relationship in which MPs exchange goods with interest groups. Drawing on insights of previous interest group research, we argue that interest groups offer three goods to legislators, who in turn accommodate their demands when casting their vote in Parliament: information, campaign contributions, and personal rewards. First, interest groups provide valuable information to legislators (e.g., Austen-Smith 1993; Bernhagen 2013; Bouwen 2004; Hall and Deardor 2006; Klüver 2013; Lohmann 1993). MPs are confronted with a multitude of different legislative proposals on which they have to make up their mind. To understand the consequences that a proposal has for their constituents, MPs need information in order to evaluate the impact of the proposed legislative framework on their electorate. MPs, are, however, typically understaffed and lack sufficient information to deal with the flood of legislative proposals. Interest groups, by contrast, are specialists that are only concerned with very specific issues. They dispose of specialized issue-relevant expertise and enjoy informational advantages vis-à-vis policy makers (Hall and Deardorff 2006, 73). Interest groups are therefore a welcome source of information for MPs. It has to be noted, however, that the preferences of interest groups and decision makers do not necessarily coincide, so there are incentives for interest groups to strategically misrepresent information in their favor. Scholars therefore frequently argue that legislators recognize these incentives and carefully assess the credibility of interest groups instead of blindly taking over the information delivered by organized interests (e.g., Ainsworth 1993; Bernhagen 2013; Potters and van Winden 1992).

Second, interest groups offer important resources that MPs need for their personal election campaign (e.g., Fellowes and Wolf 2004; Gordon 2001; Stratmann 1991; Witko 2006). Running in an election is a costly endeavor: MPs have to pay a campaign team, they have to produce marketing material, and they need to organize a number of campaign events to get their message out to voters. The budget needed for an election campaign is usually far beyond what MPs can afford, and legislative representatives are therefore strongly dependent on external funds to organize their election campaign. Interest groups are an important source of funds, as they frequently provide campaign contributions to politicians. However, it is important to note that campaign contributions are long-term investments. Interest groups do not "pay" MPs for votes on specific policy proposals. Instead, they provide regular contributions to MPs in order to generate loyal partners who owe them a favor when the time comes. As Snyder (1992, 17) put it, "A contributor cannot simply buy a congressman's vote on an important bill with a $5,000 campaign donation. Large donations over several elections, however, [...] may eventually yield considerable benefits."

Third, interest groups can also provide personal benefits that legislators receive either during or after their mandate. The literature distinguishes between personal income from lobby groups and the impact of interest groups on MPs' future career prospects. The first option entails providing (side) employment to MPs, giving gifts or bribes to politicians, or inviting them on expensive business trips. The second option concerns career opportunities after the resignation of legislators (e.g., appointments into boards of companies). These exchange relationships between interest groups and MPs pay off for both sides: Firms with personal and financial connections to politicians enjoy higher stock market evaluations (Faccio 2006), and former MPs obtain significantly higher wages after office (Eggers and Hainmueller 2009).

In order to understand the effect of interest group lobbying on voting behavior of MPs, it is furthermore

TABLE 1 Interest Group Types

	Sectional Groups	Cause Groups
Goal	Fight for interests of specific segment of society	Fight for a belief or principle
Interest	Private good	Public good
Membership	Restricted	Open to anyone
Examples	Chemical industry association	Environmental group
	Farmers association	Human rights group

important to understand which types of interest groups approach legislators, as not all interest groups cause defection. In the literature, interest groups are typically distinguished according to the nature of the interest (e.g., Dür and De Bièvre 2007; Klüver 2012; Lohmann 1998). We draw on a typology suggested by Stewart (1958, 25), who differentiated between "sectional groups" and "cause groups" (see Table 1; see also Binderkrantz 2005; Klüver 2012). Sectional groups represent a section of society such as farmers or chemical corporations. They represent special economic interests that create concentrated costs and benefits for their supporters. Cause groups, by contrast, represent some general belief or principle, such as environmental protection, public health, or human rights. The membership of cause groups is not restricted; anyone in favor of the principle can become a member of this group. Hence, while sectional groups represent the special interests of a circumscribed segment of society, cause groups fight for a public good that everyone can enjoy. Cause groups therefore typically fight for policy goals that are supported by the majority of citizens, whereas the interests of sectional groups are usually not in line with the preferences of the majority of voters.[1]

[1]It is important to note, however, that public opinion and interest group pressure are not necessarily independent of each other. Interest groups can also deliberately affect what the public thinks about a certain issue. Kollman (1998, 8), for instance, argues that interest groups use outside lobbying (e.g., protests, demonstrations, or press conferences) "to influence public opinion by changing how selected constituents consider and respond to policy issues." We have therefore estimated an additional model specification in which we control for the number of protest events, as interest groups may use such outside lobbying to shape public opinion. We coded protest events on the basis of newspaper articles published in the *Neue Zürcher Zeitung* three months before and after the referenda following the coding scheme by Kriesi et al. (1995). The results presented in Table 5 in the supporting information show that MPs defect less from voters if referenda are accompanied by protests, but that our overall findings remain stable.

The preference configuration of interest groups has important implications for explaining the voting behavior of MPs. As cause groups typically pursue policy objectives that are in line with the policy preferences of the majority of voters, they ususally do not provide any incentives for MPs to deviate from the will of their constituents. Instead, cause groups typically strengthen the congruence between legislators and their voters, as they typically support the same policy goals as the majority of citizens. By contrast, as sectional groups represent the private interests of a special segment of society, they usually pursue policy objectives that are not in line with what the majority of voters wants. Sectional groups therefore typically provide incentives for MPs to defect from their electoral constituents. Hence, while cause group lobbying should increase the congruence between voters and their representatives, sectional group lobbying should decrease the electoral link between MPs and their constituents.[2]

Hypothesis 1a: *The larger the number of sectional interest groups that support an MP, the higher the probability that the MP defects from her constituents.*

Hypothesis 1b: *The larger the number of cause groups that support an MP, the smaller the probability that the MP defects from her constituents.*

However, political parties are also in need of information and financial resources. Party groups typically only rely on a limited number of staff to deal with the multitude of policy proposals on the parliamentary agenda (see, e.g., the contributions in Heidar and Koole 2000). By constrast, interest groups are specialists that focus on a few policy issues and therefore have greater issue-specific expertise and valuable information at their disposal (Esterling 2004). Due to their informational advantages, interest groups constitute an important source of external information for parliamentary party groups. In addition, political parties have to run a nationwide election campaign, which typically costs a lot of money. Since political parties act as principals that have important stick-and-carrot instruments at their disposal to influence the voting behavior of their MPs, we expect that interest groups not only have a direct effect on voting behavior of MPs, but that they also influence MPs' legislative choices *indirectly* through lobbying their political parties.

Hypothesis 2a: *The larger the number of sectional groups that support the political party that an MP is affiliated*

[2]If one would look instead solely at the total number of interest groups, the effects of cause and sectional group lobbying would cancel each other out (see Table 6 in the supporting information). It is therefore important to distinguish between these two interest group types.

with, the higher the probability that the MP defects from her constituents.

Hypothesis 2b: *The larger the number of cause groups that support the political party that an MP is affiliated with, the smaller the probability that the MP defects from her constituents.*

Research Design

After having laid out the theoretical expectations, this section illustrates how the theoretical claims are tested empirically. We will first discuss the case selection before we illustrate how the dependent and independent variables have been created.

Case Selection: The Swiss Context

In order to empirically test our theoretical expectations, we analyze legislative voting behavior in Switzerland, as the direct democratic elements of the Swiss institutional context allow us to directly compare legislative decisions cast by MPs with the issue-specific preferences of their constituents. The Swiss political system is in many ways comparable to the institutional setting of the United States. There are two parliamentary chambers at the federal level, the *Nationalrat*, which is the equivalent to the U.S. House of Representatives, and the *Ständerat*, which is the Swiss counterpart of the U.S. Senate. The 200 members of the Nationalrat are elected according to a proportional electoral system with preferential voting options.[3] The members of Parliament (here, the Nationalrat) are elected in electoral districts that correspond to the Swiss cantons. The number of seats per canton is proportional to the number of voters, with a minimum of one seat per canton. Consequently, MPs are only accountable to the voters of their electoral district, that is, their canton of origin. The linkage between legislators and voters is insofar personalized, as voters have the option to express their preference for individual candidates on the (predefined) party lists. As in the United States, elections are called every four years and no options for earlier election dates exist.

An important feature of the Swiss political system is the popular vote. Direct democratic votes are quite common in Switzerland, with about 10 popular votes per year. Three types of direct democratic instruments can be distinguished: For changes in the constitution, a referendum is mandatory (*mandatory referendum*). In this case, a constitutional change is only adopted if a parliamentary majority, a majority of popular votes, and a majority of the Swiss cantons approve the proposal. If parliamentary legislators intend to change or implement a new law, Swiss citizens may call for a so-called *facultative referendum* on the proposed legislation after it has passed Parliament by collecting 50,000 signatures. The legislative proposal is rejected if a majority of citizens opposes the bill in the referendum. If no referendum is initiated, the parliamentary decision is automatically implemented after 90 days. Finally, Swiss citizens themselves can ask for a constitutional amendment (*initiative*) by collecting 100,000 signatures. Before such a successful initiative is scheduled for a popular vote, legislators are required to vote on this proposal in Parliament, but their approval is not necessary for passing the amendment.

The direct democratic element of the Swiss institutional setting has the important advantage that the preferences of constituents on specific legislative proposals are revealed on a regular basis. It is therefore possible to assess whether the legislative votes cast by MPs on a specific proposal are in line with the preferences of their constituents with regard to precisely the same bill. Unlike previous studies on interest group influence on MP voting, we are thus able to directly link "what legislators do" with "what the constituents want" on a large number of issues (for a similar research strategy, see Masket and Noel 2012; Matsusaka 2010; Stadelmann, Portmann, and Eichenberger 2013).

Data Set and Measuring Defection

In order to test our theoretical expectations, we analyze a data set consisting of 20,260 legislative votes cast by a total of 448 legislators on 118 policy proposals subject to parliamentary approval from 1996 until 2009 (Stadelmann, Portmann, and Eichenberger 2013). This data set matches the roll-call votes of MPs with data on the outcome of public referenda on precisely the same policy proposals. The sample comprises a broad range of policy proposals ranging from decisions on restricting immigration to the implementation of a new maternity leave scheme. Out of the total number of 118 proposals that we analyze in this study, 21 resulted in a mandatory referendum as a constitutional change was proposed, 37 were accompanied by a facultative referendum, and 60 proposals were brought on the agenda by a popular initiative for constitutional amendments. It has to be noted that on political issues that were subject to facultative referenda, it was not clear

[3] Citizens cast their vote for a party list, but they have the option to change the order of individual candidates on that list.

for MPs at the time of the legislative vote that their constituents would actually be called to a referendum. As a result, these legislative votes should not differ from other parliamentary votes from the perspective of MPs. In addition, we find that the policy issues included in our sample raised very different levels of attention among voters since voter turnout in referenda varied from 28 to 58%.

In order to assess whether MPs defect from the preferences of their voters, we compare the legislative votes cast by MPs on the 118 proposals in the national legislature with the results of the popular vote in their electoral district.[4] We consider an MP to defect from her constituents if she has cast a vote that is not in line with the majority opinion in her electoral district (which naturally includes the median voter).[5] As legislators cast their votes before the referendum takes place, MPs have to forecast the preferences of voters in their district. Since public referenda in Switzerland are typically accompanied by highly visible public debates and opinion polls, MPs have a fairly good idea about their voters' interests (see also Stadelmann, Portmann, and Eichenberger 2013).

Measuring Explanatory Variables

In order to measure the *number of interest groups* that support MPs, we make use of an institutional feature of the Swiss Parliament that provides a rich data source on interest group lobbying in Parliament: the requirement that MPs have to publicly declare all interest group affiliations.[6] The Swiss Parliament publishes an annual register in which all MPs in the national legislature have to provide detailed information about all their interest group ties. MPs are obliged to indicate the names and the legal forms of all interest groups of which they are members or in which they have an official function, such as board member or president. We measure interest group affiliations by the number of interest groups that MPs indicated in the register irrespective of their function in the interest groups.[7] This register has existed since 1985, and it is updated yearly. We have converted the annual interest group registers that were published between 1995 and 2009 into a comprehensive data set on MP interest group affiliations. The interest group ties are recorded yearly, so we capture whether the number of interest group connections changes over time. We are therefore able to determine the number of interest group affiliations of all MPs at the time when they have cast votes in the national legislature on the 118 selected proposals.

In line with our theoretical argument that lobbying has a differential effect on MP behavior depending on the type of interest group that approaches legislators, we distinguish between *sectional groups* and *cause groups* (Stewart 1958). Sectional and cause groups can be distinguished on the basis of the nature of the interest and the constituency structure. Sectional groups represent a section of society such as farmers or chemical corporations. They pursue special economic interests that create concentrated costs and benefits for their supporters. Cause groups, by contrast, represent a certain belief or principle, such as human rights or environmental protection, and anyone in favor of the policy goal can support the group. We coded interest groups as sectional or cause groups based on information about the nature of the interest and the interest group structure retrieved from organizational statutes and self-descriptions that were gathered on interest group websites and obtained from the interest group register.[8] In order to measure the number of interest groups that support a political party, we take the aggregated number of sectional and cause groups that are affiliated with MPs who belong to the same party.

The average number of sectional interest group ties per MP is 2.4, and the legislator with the maximum number of sectional interest group affiliations (30) is Arthur Loepfe from the Christian Democratic Party. By contrast, the average number of MP ties to cause groups is 1.5, with the maximum number of cause group affiliations being 16 (Bea Heim, Social Democratic Party). We have conducted a t-test, which indicated that the number of sectional interest group ties is significantly larger than the number of cause group ties to individual MPs.[9] This

[4]To measure MP behavior in Parliament, we consider the final passage votes of the laws and initiatives, which are automatically published online by the Swiss Parliament.

[5]Adding a control variable that discriminates for districts where the local constituents and the majority of Swiss constituents (dis)agree simultaneously does not alter the results; see Table 5 in the supporting information.

[6]Detailed information on data sources is available in Table 2 in the supporting information.

[7]We use the terms interest group *ties, affiliations, and connections* interchangeably to denote the interest groups that MPs reported in the parliamentary register. One may argue that interest groups may have a stronger impact on legislators if MPs fulfill an official function rather than only being a member of an interest group (which concerns only about 4% of all indicated interest group ties). We therefore conducted a robustness check by restricting the sample to interest groups in which MPs hold executive functions (see Table 6 in the supporting information). Our major findings remain unchanged.

[8]Reliability tests indicate an agreement of 86% and a Krippendorff's alpha of 0.77.

[9]The results of the t-test at the MP level are as follows: $t = 34.70$, $\Pr(|T| > |t|) = 0.000$.

FIGURE 1 Number of Interest Groups per Legislator

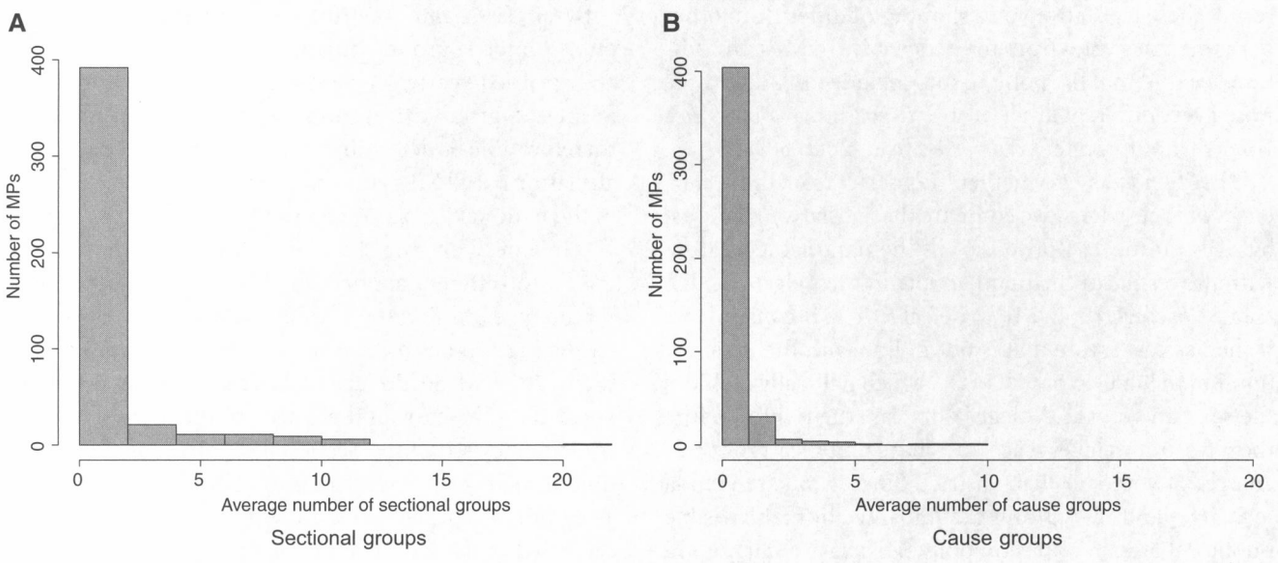
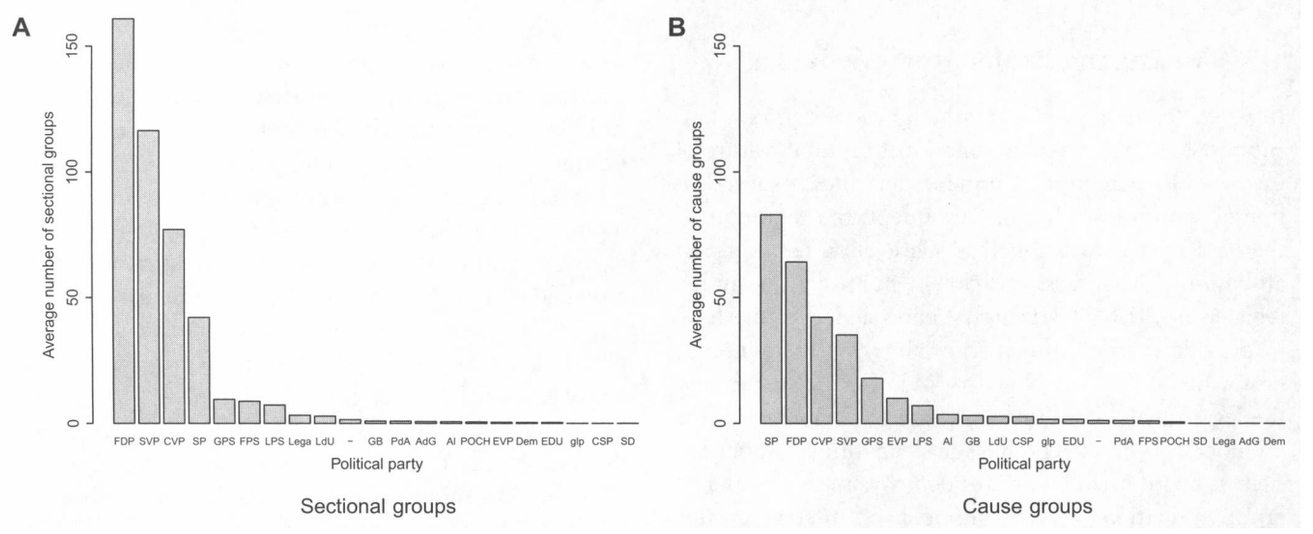


FIGURE 2 Number of Interest Groups per Party



indicates that sectional groups are much better organized than cause groups and can make their voice heard much more effectively. The distribution of interest group ties across MPs averaged across their years in Parliament is shown in Figure 1.

With regard to interest group ties on the party level, we find an average of 82.2 sectional groups and 47.8 cause groups per party. Hence, sectional groups not only maintain a broader network with individual MPs, but also with political parties in comparison with cause groups.[10] There is considerable variation among party groups: While the liberal party Freisinnig Demokratische Partei (FDP) is most strongly connected to sectional groups, the social democratic party Sozialdemokratische Partei (SP) maintains most ties of all parties to cause groups. Figure 2 shows the number of sectional and cause group ties of each party averaged over all years.

It has to be noted, however, that our proxy does not capture the issue-specific activities of interest groups. We are not measuring how much information interest groups supply to MPs in a specific policy debate or how much money interest groups promise for a certain vote. Nevertheless, interest group affiliation should be a very good proxy that captures the long-term network of interest groups with MPs. As discussed in the theoretical

[10]The results of the t-test at the party level are as follows: $t = 81.08$, $\Pr(|T| > |t|) = 0.000$.

framework, Snyder (1992) has, for instance, shown that interest groups cannot simply buy a legislative vote with a campaign donation. What matters is that interest groups build up a long-term relationship of mutual trust and respect with MPs in which goods are exchanged (e.g., Bouwen 2004; Snyder 1992). Snyder (1992) therefore shows that interest groups do not make ad hoc campaign contributions, but that they regularly provide campaign donations over several elections in order to receive rewards from MPs. Following this line of reasoning, MP affiliation with interest groups indicates a long-term relationship between MPs and organized interests on the basis of which interest groups can gain influence over legislative decisions by "their" MPs through the supply of information, campaign contributions, and personal renumeration. To further check the validity of the interest group register as a measure of interest group ties, we moreover compared the registrations with parliamentary access cards that Swiss MPs can hand out to individuals. In an out-of-sample comparison for the year 2013, we find that 86% of the parliamentary access cards are given to representatives of interest groups that MPs indicated in the interest group register, which underlines the strong ties that MPs have with the interest groups mentioned in the register.

Operationalization of Control Variables

In order to analyze the effect of interest groups on voting behavior of MPs, we first include a measure for the number of months until the next parliamentary election to assess whether defection varies over the course of the *electoral cycle*.[11] The maximum number of months is 46.8, which constitutes the beginning of a legislative term, whereas the minimum number is 0, which marks the end of the legislative term and the occurrence of a new parliamentary election. Second, we control for the *number of MPs per electoral district*, as one may argue that the electoral connection between representatives and their voters is stronger for MPs from single-member districts than for MPs from electoral districts with multiple parliamentary representatives (Portmann, Stadelmann, and Eichenberger 2012).[12] Third, we control for whether the MP voted in line with the *official position of the party* that she is affiliated with since party groups have important stick-and-carrot instruments at their disposal to discipline their members, such as committee assignments or allocating time on the floor (Carey 2007; Hix 2002; Sieberer 2006). We measure the official position of parties by the vote recommendations that party congresses give to voters during the referendum campaigns. We code this variable as 1 when the MP vote is in accordance with the official party position and 0 otherwise. Fourth, we include a measure for the *closeness of the vote among constituents*, as it is plausible to expect that it is easier for MPs to defect from the majority of their voters if the difference between supporters and opponents of a policy proposal is small. We operationalize the closeness of the vote among constituents by the absolute distance from a 50% outcome in the referendum. Fifth, we additionally control for the *closeness of the vote in the legislature* since previous research has shown that interest groups have a stronger impact on critical votes, that is, legislative votes that are close races (Gordon 2001). Sixth, we control for the *salience* of policy issues, as several studies have found that the effect of interest groups on legislative votes cast by MPs is affected by the salience of proposals among the general public (e.g., Jones and Keiser 1987; Neustadtl 1990; Witko 2006). We measure the salience of policy issues by the media attention to the proposal during the parliamentary debate. We coded the number of articles mentioning the proposal published in the leading newspaper *Neue Zürcher Zeitung* three months before and after the parliamentary vote. Finally, we control for the different institutional *types of referenda* held in Switzerland (i.e., mandatory, facultative, initiative), with popular initiatives being the omitted category.[13]

Data Analysis

The Extent of Defection

We first examine the overall quality of constituency representation in Switzerland. Table 2 reveals that in about two-thirds of all the votes cast by MPs on the 118 referenda in our sample, MPs voted in accordance with their constituents. However, at the same time, we find that MPs deviate considerably from the preferences of their voters. In about 33% of all legislative decisions that we analyzed, MPs did not cast their vote in line with the interests of their constituents. It is a normative question whether this level of congruence is considered a good benchmark (see Pitkin 1967). In this study, our focus is less on the

[11] The dates of the referenda are determined by the administration and are thus exogenous.

[12] As a robustness check, we also estimated additional model specifications in which we interacted district magnitude with the number of interest group ties (see Table 7 in the supporting information). The results are, however, inconclusive.

[13] Summary statistics can be found in Table 1 in the supporting information.

TABLE 2 Quality of Constituency Representation—Congruence between Legislators and Constituents' Preferences

	All Referenda
MP vote matches majority of constituents	67.2%
MP defects from majority of constituents	32.8%
Observations	20,260
Number of referenda	118

level of congruence than on the question of whether MP defection occurs due to the effect of interest group lobbying on MP behavior.

Explaining Defection

In order to empirically test the impact of interest group lobbying on MP defection from their voters, we need to take into account the special structure of the data set. The observations in our data set are not independent, as assumed by ordinary regression analysis, but clustered on the one hand into electoral districts in which MPs are elected and on the other hand into political parties. MPs who come from the same electoral district are accountable to the same voters and are therefore subject to the same electoral pressures. Similarly, MPs who belong to the same party have to follow the same party guidelines in order not to risk their nomination on the party lists and their career prospects. Hence, our data set is hierarchically structured, as MPs are clustered into electoral districts and political parties. Ignoring the clustering of the data may result in deflated standard errors and inflated type I error rates so that predictors seem to have a significant effect even though they do not (Steenbergen and Jones 2002, 219–20). We therefore draw on a cross-classified multilevel regression model that takes the twofold clustering into account to analyze the data. As the dependent variable is of a binary nature, we estimate multilevel logistic regression models.

We present the empirical findings of our regression analysis in Table 3. Model 1 reports the findings with regard to interest group ties on the individual MP level. Model 2 presents the findings concerning the effect of interest group lobbying on the party level, and Model 3 simultaneously includes interest group ties at the MP and the party levels. The multilevel analysis indicates that interest group lobbying indeed has an impact on MP defection from their voters on both the individual MP level and the party level. While sectional group ties increase the probability that MPs defect from their voters, cause group lobbying decreases the likelihood that MPs deviate from the preferences of their constituents.[14]

In order to illustrate the effect of interest group ties on MP defection, we simulated predicted probabilities as suggested by King, Tomz, and Wittenberg (2000; see Figure 3 and Figure 4). We display the simulated predicted probability of MP defection from voter preferences, as the number of sectional and cause groups supporting the individual MP (Figure 3) and her party (Figure 4) varies, while holding all other variables at their mean (continuous variables) or median (categorical variables) values. The point estimates of the predicted probabilities are indicated by the solid lines, and the 95% confidence intervals are illustrated by the dashed lines.

The probability that MPs defect from their constituents steadily increases with the number of sectional group ties at both the individual MP level and the party level. MPs with strong personal ties to sectional groups are significantly more likely to defect from voter preferences. Similarly, legislative representatives belonging to political parties that are strongly connected to sectional groups also deviate significantly more from their constituents. By contrast, the probability that MPs defect from their constituents steadily decreases with the number of cause group ties at both the individual MP level and the party level. Hence, while sectional groups distort the representational link between MPs and their constituents, cause groups strengthen the congruence between voters and their representatives. Going beyond previous research often arriving at contradictory findings regarding the effect of interest groups on MP behavior, our study thus importantly shows that the effect of interest group lobbying on the link between voters and their MPs is not constant, but that it is conditioned by interest group type. However, it has to be noted that the magnitude of the effect of interest group ties on MP defection varies. While lobbying individual MPs has only a moderate effect on their behavior, as shown in Figures 3a and 3b, lobbying political parties in the legislature exhibits a much stronger effect on the probability of defecting from voters, as illustrated in Figures 4a and 4b. As a result, when trying to influence legislative decisions, lobbying political parties is a much more promising strategy for interest groups than approaching individual MPs.

In order to test the robustness of the findings, we additionally estimated two regression models including

[14]We estimated an additional model specification in which we used a composite measure of interest group ties that was constructed by taking the difference between the number of sectional and cause group affiliations (see Table 9 in the supporting information). The results confirm our findings that sectional groups increase the probability of defection, whereas cause groups decrease the likelihood of MP defection.

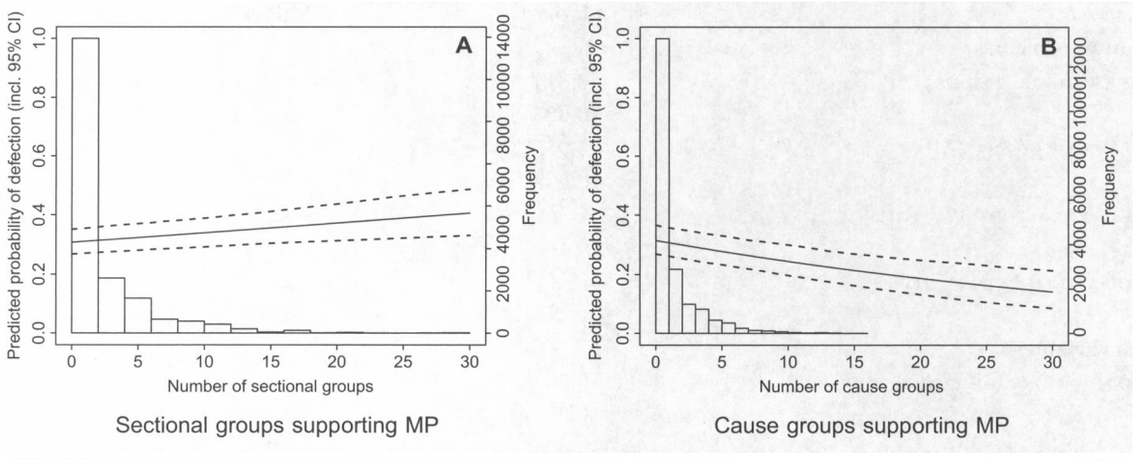
TABLE 3 The Effect of Lobbying on MP Defection

DV: Defection	Model 1	Model 2	Model 3
Explanatory variables			
No. of sectional groups (MP)	0.014**		0.011*
	(0.005)		(0.005)
No. of cause groups (MP)	−0.035**		−0.022**
	(0.008)		(0.009)
No. of sectional groups (Party)		0.005**	0.005**
		(0.001)	(0.000)
No. of cause groups (Party)		−0.005**	−0.005**
		(0.001)	(0.001)
Control variables			
No. of months until next election	−0.003*	−0.001	−0.001
	(0.001)	(0.001)	(0.001)
No. of MPs per canton	−0.003	−0.003*	−0.003
	(0.002)	(0.002)	(0.002)
Official party position congruence	−0.544**	−0.587**	−0.590**
	(0.049)	(0.050)	(0.050)
Closeness of referendum	0.034**	0.034**	0.034**
	(0.002)	(0.002)	(0.002)
Closeness of parliamentary decision	0.043**	0.043**	0.043**
	(0.002)	(0.002)	(0.002)
Salience	−0.003	−0.003	−0.003
	(0.002)	(0.002)	(0.002)
Obligatory referendum	−0.422**	−0.422**	−0.423**
	(0.049)	(0.049)	(0.049)
Facultative referendum	−0.510**	−0.513**	−0.514**
	(0.040)	(0.040)	(0.040)
Constant	1.256**	1.184**	1.195**
	(0.133)	(0.149)	(0.149)
Random effects			
Canton-level variance	0.000	0.000	0.000
Party-level variance	0.212	0.297	0.299
Model fit			
N	20,260	20,260	20,260
Log likelihood	−11609	−11592	−11585
AIC	23248	23212	23202
BIC	23358	23323	23329

Notes: Results are from a cross-classified multilevel logistic regression. Logit coefficients are shown, with standard errors in parentheses. ** $p \leq 0.01$, * $p \leq 0.05$.

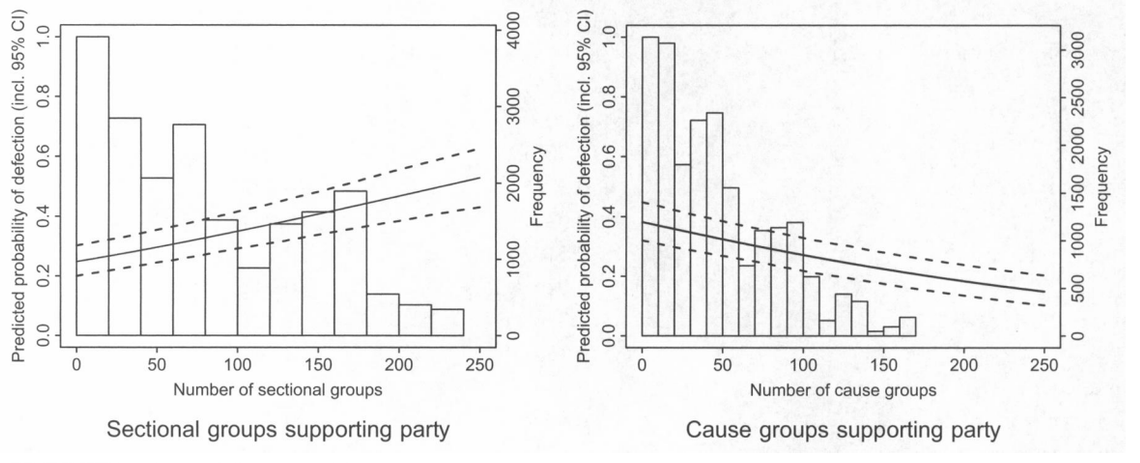
fixed effects for (a) political parties and (b) party families to make sure that the lobbying effect detected at the party level is not due to systematic differences between political parties. The additional model specifications show that the effect of the number of sectional and cause group ties on the individual MP level and on the party level are robust if we control for (a) political parties and (b) party families. We moreover estimated a multilevel model including fixed effects for (c) policy areas, as one might argue that lobbying is more successful in some policy areas than in others. However, the regression analysis similarly confirms the findings for the number of sectional and cause groups supporting an individual MP or an MP's political party. Finally, we have estimated another model in which we control for the left-right policy position of political parties that MPs are affiliated with to check whether the ideological orientation of MPs accounts for their defection from electoral constituents.

FIGURE 3 The Effect of Interest Groups on MP Defection (Individual MP Level)



Note: These figures are based on Model 1.

FIGURE 4 The Effect of Interest Groups on MP Defection(Party Level)



Note: These figures are based on Model 2.

We did not find any systematic effect, so ideological orientation cannot account for the defection of MPs.[15]

With regard to the control variables, the empirical analysis shows that defection from voter preferences is less likely if the MP's decision is in line with the official position of the party she is affiliated with. We moreover show that the closeness of the vote in Parliament as well as the closeness of the referendum outcome in an MP's home district have a positive effect on MP defection. Thus, MPs tend to deviate more on policy issues on which their electorate and the Parliament is divided. Finally, our results indicate that the type of referendum matters. MP defection is less likely on issues that were subject to mandatory and facultative referenda than on issues that were subject to popular initiatives.

The Difference between Cause and Sectional Groups

In order to test the effect of cause and sectional interest group lobbying on MP defection in more detail, we performed an additional analysis and coded the policy positions of interest groups for three exemplary cases. We were able to find information on the policy positions of interest groups regarding specific referenda on interest group homepages and on the website of the Swiss Parliament. It is, however, not possible to find such information for all

[15]These alternative model specifications can be found in Table 4 and Table 10 in the supporting information, which furthermore includes a number of additional robustness checks.

TABLE 4 Case Study Sample

Date	Topic	Popular Vote	Turnout	Parliam. Vote	Type
June 13, 1999	Revision of law on disability insurance	rejected (30.3% yes)	45.6%	92 yes, 77 no	facultative
Nov. 26, 2006	Federal law on family allowances	adopted (68.00% yes)	45.1%	106 yes, 85 no	facultative
May 17, 2009	Implementation of biometric passports	adopted (50.15% yes)	38.8%	94 yes, 81 no	facultative

Source: www.swissvotes.ch.

TABLE 5 Logistic Regression Explaining MP Defection from Constituents' Preferences

DV: Defection	Model 1 (1999)	Model 2 (2006)	Model 3 (2009)
No. of interest groups in opposition to constituents	3.89**	1.02**	1.45*
	(0.64)	(0.30)	(0.63)
No. of MPs per canton	0.01	−0.01	−0.04
	(0.02)	(0.01)	(0.04)
Official party position congruence	−2.88*	0.03	−0.92
	(1.31)	(0.37)	(0.60)
Constant	0.88	−1.21**	0.54
	(1.28)	(0.43)	(0.81)
Model fit			
N	291	215	268
Log likelihood	−84.09	−131.91	−155.25

Notes: Logit coefficients are shown, with standard errors in parentheses. ** $p \leq 0.01$, * $p \leq 0.05$.

interest groups and for all referenda in our sample since, on the one hand, not all interest groups publish positions on all proposals and, on the other hand, such information is particularly hard to find for referenda conducted in the early years of our sample. We therefore selected three cases following a combination of a typical case and a most similar system design strategy (Gerring 2007) by selecting referenda for which the statistical model performed very well in predicting the voting behavior of MPs and for which we hold the type of referenda, the closeness of the parliamentary decision, and the salience of the issue among voters constant while varying popular majorities (see Table 4). For the three selected referenda, we managed to code a sizable set of interest group positions, among others those of the most powerful economic association (economiesuisse) and several important cause groups such as World Wide Fund for Nature (WWF), women's rights organizations, or Caritas, one of the world's largest development and social welfare organization.

We first assess whether affiliation with interest groups that disagree with the voters of an MP makes defection more likely. We estimated regression models in the same fashion as for the full sample with two important modifications: First, the indicator for interest group lobbying now captures whether an MP is affiliated with interest groups that issued a position in opposition to what her constituents want. Second, we ran separate regressions for each selected referendum so that we are now operating at the level of a single policy proposal. We accordingly updated the inclusion of control variables and adapted the multilevel setup to the new specification (clustered standard errors on MP level). The results presented in Table 5 confirm our theoretical expectations. MPs who are affiliated with interest groups that have opposing views to what the majority of the MPs' voters want are more likely to defect from their constituents.

TABLE 6 The Alignment of Sectional and Cause Groups with the Majority of Voters

Interest Group Configuration	1999	2006	2009
Sectional groups in line with majority	1%	41%	42%
Sectional groups not in line with majority	99%	59%	58%
Cause groups in line with majority	79%	77%	68%
Cause groups not in line with majority	21%	23%	32%

Second, on the basis of the coded interest group position data, we can furthermore examine whether cause groups indeed more often agree with voters than sectional groups. Table 6 compares the position of interest groups with the majority position of voters. The evidence

presented here shows a clear division between sectional and cause groups: While the majority of the former hold positions that oppose citizens' preferences, cause groups predominantly agree with what citizens prefer. In addition, Table 6 shows that even though sectional groups are primarily opposed to the majority view among citizens, they are characterized by a varying level of heterogeneity across policy issues. This is an interesting phenomenon that corresponds with recent findings by Klüver (2013) as well as Dür, Bernhagen, and Marshall (n.d.) and should be explored in more detail in future work.

Conclusion

Do MPs listen to interest groups instead of their voters? In this study, we have examined to what extent interest groups bias the electoral connection between legislative representatives and their voters. We have employed a novel data set that takes advantage of a unique feature of the Swiss political system, namely, that public referenda are frequently called on policy proposals that are also voted on in Parliament. The empirical results of this study indicate that interest groups indeed have an impact on MP behavior in Parliament. Legislators who have strong ties with sectional groups are significantly more likely to deviate from the preferences of their voters, whereas links with cause groups in fact increase the congruence between what voters want and what their representatives do. Thus, interest groups have a differential impact on the electoral connection between citizens and their legislative representatives.

What do our findings tell us about the role of interest groups for democratic representation? There are two different chains of representation in which the role of interest groups has to be assessed. On the one hand, interest groups are important intermediary organizations that aggregate and articulate societal interests toward political decision makers (Easton 1965). They ensure that societal interests have a voice that is heard by political decision makers and therefore constitute an important bridge between society and political institutions. Accordingly, we find that a large number of interest groups approach legislative representatives in Switzerland to represent their members' interests. On the other hand, the electoral side of political representation that links individual citizens with their legislative representatives is biased by sectional groups, whereas cause groups in fact strenghten this link.

Thus, while interest groups enhance democratic representation by articulating the interests of societal groups toward policy makers, they partly undermine political representation in the electoral arena that links citizens with the MPs they have voted for. The positive role played by interest groups in transmitting the concerns of societal groups to political decision makers is furthermore limited by the fact that not all societal interests have the same collective action capabilities (Olson 1965). Accordingly, we find that sectional groups representing concentrated economic interests find it a lot easier to get mobilized than cause groups representing diffuse interests. Sectional groups outnumber cause groups, so significantly more MPs are lobbied by sectional groups than by cause groups. They dominate the parliamentary sphere and are therefore able to bias legislative outcomes in their favor.

This study has made an important contribution to understanding the effect of interest groups on legislative votes. By directly comparing the votes cast by MPs on policy proposals in Parliament with the preferences of their voters on these issues, we showed that MPs with strong ties to sectional groups were considerably more likely to defect from their constituents and that links to cause groups enhanced the congruence between voters and their representatives. However, to what extent are our results generalizable? External validity beyond the case of Switzerland is difficult to assess. On the one hand, Switzerland is a unique case due to the strong direct democratic elements. It is precisely for that reason that we selected Switzerland, as it allows for directly comparing the preferences of voters with the decisions cast by their legislative representatives. On the other hand, Switzerland shares many similarities with other political systems. First, the electoral system in Switzerland combines elements of a proportional and a majoritarian electoral system, as some MPs of the lower house are elected in majoritarian elections while the rest are elected through proportional representation (see, e.g., Hug 2012). Hence, studying MP behavior in Switzerland allows for making comparisons to MP behavior in both proportional and majoritarian electoral systems. Second, political parties play an important role for Swiss MPs, as they control candidate selection and career prospects of legislative representatives in Parliament. Accordingly, party group cohesion in the Swiss Parliament is relatively high, reaching between 70 and 90% according to the Rice index (Traber, Hug, and Sciarini, 2014). Hence, the role of political parties as an important actor through which interest groups can influence the voting behavior of MPs is comparable to many other political systems. Finally, the composition of the interest group population that lobbies Swiss MPs very much resembles the interest group population mobilizing in other political systems, such as the United States, the United Kingdom, Denmark, and even the European Union (Leech et al. 2005; Rasmussen 2015; Wonka et al. 2010). Given the similarity of the electoral

system, the important role of political parties, and the activity of interest groups, it is not readily apparent why we would expect dramatically different results in other Western countries with regard to how interest groups influence MPs. However, external validity is of course best achieved by carrying out comparable studies in different countries, and we therefore hope to stimulate comparative research on interest group influence on MP behavior in other political systems.

References

Ainsworth, Scott. 1993. "Regulating Lobbyists and Interest Group Influence." *Journal of Politics* 55(1): 41–56.

Ansolabehere, Stephen, James M. Snyder Jr., and Charles Stewart III. 2001. "The Effects of Party and Preferences on Congressional Roll-Call Voting." *Legislative Studies Quarterly* 26(4): 533–72.

Austen-Smith, David. 1993. "Information and Influence: Lobbying for Agendas and Votes." *American Journal of Political Science* 37(4): 799–833.

Baumgartner, Frank R., Jeffrey M. Berry, Marie Hojnacki, David C. Kimball, and Beth Leech. 2009. *Lobbying and Policy Change: Who Wins, Who Loses, and Why.* Chicago: University of Chicago Press.

Baumgartner, Frank R., and Beth Leech. 1998. *Basic Interests: The importance of groups in politics and in political science.* Princeton, NJ: Princeton University Press.

Bernhagen, Patrick. 2012. "Who Gets What in British Politics—and How? An Analysis of Media Reports on Lobbying around Government Policies, 2001–7." *Political Studies* 60(3): 557–77.

Bernhagen, Patrick. 2013. "When Do Politicians Listen to Lobbyists (and Who Benefits When They Do)?" *European Journal of Political Research* 52(1): 20–43.

Binderkrantz, Anne. 2005. "Interest Group Strategies: Navigating between Privileged Access and Strategies of Pressure." *Political Studies* 53(4): 694–715.

Bouwen, Pieter. 2004. "Exchanging Access Goods for Access: A Comparative Study of Business Lobbying in the European Union Institutions." *European Journal of Political Research* 43(3): 337–69.

Bronars, Stephen G., and John R. Lott. 1997. "Do Campaign Contributions Alter How a Politician Votes? Or Do Donors Support Candidates Who Value the Same Thing That They Do?" *Journal of Law and Economics* 40(2): 317–50.

Carey, John M. 2007. "Competing Principals, Political Institutions, and Party Unity in Legislative Voting." *American Journal of Political Science* 51(1): 92–107.

Clinton, Joshua D. 2006. "Representation in Congress: Constituents and Roll Calls in the 106th House." *Journal of Politics* 68(2): 397–409.

Cox, Gary W., and Mathew D. McCubbins. 1993. *Legislative Leviathan: Party Government in the House.* Berkeley: University of California Press.

Downs, Anthony. 1957. *An Economic Theory of Democracy.* New York: Harper.

Dür, Andreas. 2008. "Measuring Interest Group Influence in the EU: A Note on Methodology." *European Union Politics* 9(4): 559–76.

Dür, Andreas, Patrick Bernhagen, and David Marshall. 2015 "Interest Group Success in the European Union: When (and Why) Does Business Lose?" *Comparative Political Studies,* Published online before print January 20, 2015, doi: 10.1177/0010414014565890. Forthcoming.

Dür, Andreas, and Dirk De Bièvre. 2007. "Inclusion without influence? NGOs in European Trade Policy." *Journal of Public Policy* 27(1): 79–101.

Easton, David. 1965. *A Systems Analysis of Political Life.* New York: Wiley.

Eggers, Andrew C., and Jens Hainmueller. 2009. "MPs for Sale? Returns to Office in Postwar British Politics." *American Political Science Review* 103(4): 513–33.

Esterling, Kevin M. 2004. *The Political Economy of Expertise: Information and Efficiency in American National Politics.* Ann Arbor: University of Michigan Press.

Faccio, Mara. 2006. "Politically Connected Firms." *American Economic Review* 96(1): 369–86.

Fellowes, Matthew C., and Patrick J. Wolf. 2004. "Funding Mechanisms and Policy Instruments: How Business Campaign Contributions Influence Congressional Votes." *Political Research Quarterly* 57(2): 315–24.

Frendreis, John P., and Richard W. Waterman. 1985. "PAC Contributions and Legislative Behavior: Senate Voting on Trucking Deregulation." *Social Science Quarterly* 66(2): 401–12.

Gerring, John. 2007. *Case Study Research.* Cambridge: Cambridge University Press.

Gordon, Stacy B. 2001. "All Votes Are Not Created Equal: Campaign Contributions and Critical Votes." *Journal of Politics* 63(1): 249–69.

Grenzke, Janet M. 1989. "PACs and the Congressional Supermarket: The Currency Is Complex" *American Journal of Political Science* 33(1): 1–24.

Hall, Richard L., and Alan Deardorff. 2006. "Lobbying as Legislative Subsidy." *American Political Science Review* 100(1): 69–84.

Heidar, Knut, and Ruud Koole, eds. 2000. *Parliamentary Party Groups in European Democracies: Political Parties behind Closed Doors.* London: Routledge.

Hix, Simon. 2002. "Parliamentary Behavior with Two Principals: Preferences, Parties, and Voting in the European Parliament." *American Journal of Political Science* 46(3): 688–98.

Hojnacki, Marie, David C. Kimball, Frank R. Baumgartner, Jeffrey M. Berry, and Beth L. Leech. 2012. "Studying Organizational Advocacy and Influence: Reexamining Interest Group Research." *Annual Review of Political Science* 15: 379–99.

Hug, Simon. 2012. "Parliamentary Voting." In *Party Governance and Party Democracy,* ed. Wolfgang C. Müller and Hanne Marthe Narud. New York: Springer, 137–57.

Jones, Woodrow, Jr., and K. Robert Keiser. 1987. "Issue Visibility and the Effects of PAC Money." *Social Science Quarterly* 68(1): 170–76.

Kam, Christopher. 2008. *Party Discipline and Parliamentary Politics.* New York: Cambridge University Press.

King, Gary, Michael Tomz, and Jason Wittenberg. 2000. "Making the Most of Statistical Analyses: Improving

Interpretation and Presentation." *American Journal of Political Science* 44(2): 341–55.

Klüver, Heike. 2012. "Biasing Politics? Interest Group Participation in European Policy-Making." *West European Politics* 35(5): 1114–33.

Klüver, Heike. 2013. *Lobbying in the European Union: Interest Groups, Lobbying Coalitions and Policy Change.* Oxford: Oxford University Press.

Kollman, Ken. 1998. *Outside Lobbying: Public Opinion and Interest Group Strategies.* Princeton, NJ: Princeton University Press.

Kriesi, Hanspeter, Ruud Koopmans, Jan Willem Duyvendak, and Marco Giugni. 1995. *New Social Movements in Western Europe; A Comparative Analysis.* Minneapolis: University of Minnesota Press.

Langbein, Laura I., and Mark Lotwis. 1990. "The Political Efficacy of Lobbying and Money: Gun Control in the U.S. House, 1986." *Legislative Studies Quarterly* 15(3): 413–40.

Leech, Beth L., Frank R. Baumgartner, Timothy M. La Pira, and Nicholas A. Semanko. 2005. "Drawing Lobbyists to Washington: Government Activity and the Demand for Advocacy." *Political Research Quarterly* 58(1): 19–30.

Lohmann, Susanne. 1993. "A Signaling Model of Informative and Manipulative Political Action." *American Review of Political Science* 87(2): 319–33.

Lohmann, Susanne. 1998. "An Information Rationale for the Power of Special Interests." *American Political Science Review* 92(4): 809–27.

Lowery, David. 2013. "Lobbying Influence: Meaning, Measurement and Missing." *Interest Groups & Advocacy* 2(1): 1–26.

Mahoney, Christine. 2008. *Brussels versus the Beltway: Advocacy in the United States and the European Union.* Washington, DC: Georgetown University Press.

Masket, Seth E., and Hans Noel. 2012. "Serving Two Masters Using Referenda to Assess Partisan versus Dyadic Legislative Representation." *Political Research Quarterly* 65(1): 104–23.

Matsusaka, John G. 2010. "Popular Control of Public Policy: A Quantitative Approach." *Quarterly Journal of Political Science* 5(2): 133–67.

Miller, Warren E., and Donald E. Stokes. 1963. "Constituency Influence in Congress." *American Political Science Review* 57(1): 45–56.

Neustadtl, Alan. 1990. "Interest-Group PACsmanship: An Analysis of Campaign Contributions, Issue Visibility, and Legislative Impact." *Social Forces* 69(2): 549–64.

Olson, Mancur. 1965. *The Logic of Collective Action: Public Goods and the Theory of Groups.* Cambridge, MA: Harvard University Press.

Pitkin, Hanna Fenichel. 1967. *The Concept of Representation.* Berkeley: University of California Press.

Portmann, Marco, David Stadelmann, and Reiner Eichenberger. 2012. "District Magnitude and Representation of the Majority's Preferences: Evidence from Popular and Parliamentary Votes." *Public Choice* 151(3–4): 585–610.

Potters, Jan, and Frans vanWinden. 1992. "Lobbying and Asymmetric Information." *Public Choice* 74(3): 269–92.

Powell, Bingham G., Jr. 2000. *Elections as Instruments of Democracy: Majoritarian and Proportional Visions.* New Haven, CT: Yale University Press.

Powell, G. Bingham. 2004. "Political Representation in Comparative Politics." *Annual Review of Political Science* 7(1): 273–96.

Rasmussen, Anne. 2015. "Participation in Written Government Consultations in Denmark and the UK: System and Actor-level Effects." *Government and Opposition* 50(2): 271–299.

Riker, William Harrison. 1962. *The Theory of Political Coalitions.* New Haven, CT: Yale University Press.

Rothenberg, Lawrence S. 1992. *Linking Citizens to Government: Interest Group Politics at Common Cause.* New York: Cambridge University Press.

Schattschneider, Elmer E. 1960. *The Semisovereign People: A Realist's View of Democracy in America.* New York: Holt.

Segal, Jeffrey A., Charles M. Cameron, and Albert D. Cover. 1992. "A Spatial Model of Roll Call Voting: Senators, Constituents, Presidents, and Interest Groups in Supreme Court Confirmations." *American Journal of Political Science* 36(1): 96–121.

Sieberer, Ulrich. 2006. "Party Unity in Parliamentary Democracies: A Comparative Analysis." *Journal of Legislative Studies* 12(2): 150–78.

Smith, Richard A. 1995. "Interest Group Influence in the U.S. Congress." *Legislative Studies Quarterly* 20(1): 89–139.

Snyder, James M. 1992. "Long-Term Investing in Politicians: Or, Give Early, Give Often." *Journal of Law and Economics* 35(1): 15–43.

Stadelmann, David, Marco Portmann, and Reiner Eichenberger. 2013. "Quantifying Parliamentary Representation of Constituents' Preferences with Quasi-Experimental Data." *Journal of Comparative Economics* 41(1): 170–80.

Steenbergen, Marco R., and Bradford S. Jones. 2002. "Modeling Multilevel Data Structures." *American Journal of Political Science* 46(1): 218–37.

Stewart, John David. 1958. *British Pressure Groups: Their Role in Relation to the House of Commons.* Oxford: Clarendon Press.

Stratmann, Thomas. 1991. "What Do Campaign Contributions Buy? Deciphering Causal Effects of Money and Votes." *Southern Economic Journal* 57(3): 543–65.

Stratmann, Thomas. 1995. "Campaign Contributions and Congressional Voting: Does the Timing of Contributions Matter?" *Review of Economics and Statistics* 77(1): 127–36.

Stratmann, Thomas. 1996. "How Reelection Constituencies Matter: Evidence from Political Action Committees' Contributions and Congressional Voting." *Journal of Law and Economics* 39(2): 603–35.

Traber, Denise, Simon Hug, and Pascal Sciarini. 2014. "Party Unity in the Swiss Parliament: The Electoral Connection." *Journal of Legislative Studies* 20(2): 193–215.

Wawro, Gregory. 2001. "A Panel Probit Analysis of Campaign Contributions and Roll-Call Votes." *American Journal of Political Science* 45(3): 563–79.

Weingast, Barry R., and William Marshall. 1988. "The Industrial Organization of Congress." *Journal of Political Economy* 96(1): 132–63.

Wilhite, Alan, and John W. Thielman. 1987. "Labor PAC Contributions and Labor Legislation: A Simultaneous Logit Approach." *Public Choice* 53(3): 267–76.

Witko, Christopher. 2006. "PACs, Issue Context, and Congressional Decisionmaking." *Political Research Quarterly* 59(2): 283–95.

Wonka, Arndt, Frank R. Baumgartner, Christine Mahoney, and Joost Berkhout. 2010. "Measuring the Size of the EU Interest Group Population." *European Union Politics* 11(3): 463–76.

Wright, John R. 1985. "PACs, Contributions, and Roll-Calls: An Organizational Perspective." *American Political Science Review* 79(2): 400–14.

Wright, John R. 1990. "Contributions, Lobbying, and Committee Voting in the U.S. House of Representatives." *American Political Science Review* 84(2): 417–38.

Yackee, Jason Webb, and Susan Webb Yackee. 2006. "A Bias Towards Business? Assessing Interest Group Influence on the U.S. Bureaucracy." *Journal of Politics* 68(1): 128–39.

Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher's website:

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