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Center for Research in Economics, Management and the Arts

How Lobbying Affects Representation: Results for Majority-Elected Politicians

Working Paper No. 2015-15

How Lobbying Affects Representation: Results for Majority-Elected Politicians^{*}

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Abstract: Combining referendum results with parliamentary votes of proportionally-elected politicians of the Swiss Lower House of Parliament, Giger and Klüver (American Journal of Political Science, forthcoming) find that sectional and cause interest groups affect the quality of political representation. We extend their analysis to a new dataset of majority-elected politicians of the Upper House. Our results show that sectional and cause groups *do not* affect defection of politicians from their constituents. This suggests that the electoral system moderates the influence of interest groups on political representation.

Keywords: Interest groups, representation, referenda, MP defection, electoral systems.

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I. INTRODUCTION

The idea that interest groups affect political representation of constituents' preferences is an old one in political science. A major difficulty of empirical studies on representation is to elicit constituents' preferences on legislative proposals and confront them with actual decisions by political representatives (see, among others, Bender and Lott 1996, Gerber and Lewis 2004, Witko 2006, Powell 2009, Bafumi and Herron 2010, Golder and Stramski 2010, Matsusaka 2010).

In "Voting Against Your Constituents? How Lobbying Affects Representation" Giger and Klüver (forthcoming) (henceforth GK) assess the impact of different types of interest groups on representation by comparing the revealed preferences of the majority of constituents in Swiss referenda with legislative decisions made by members of parliament (MPs) of the Lower House on identical proposals.¹ They distinguish two types of interest groups (see Stewart 1958 or Klüver 2012), i.e. sectional and cause groups, and show that proportionally-elected MPs with ties to more sectional groups have a higher probability to defect from the majority of their constituents, while having affiliations with cause groups fosters congruence between MPs and their constituents. We applaud GK's approach to identify differences between types of interest group when analyzing whether MPs defect from constituent preferences. Their analysis is an important step ahead compared to received literature on MP defection which only analyzed the total number of interest groups (see Portmann et al. 2012).

GK focus on proportionally-elected politicians, only. The employed measure of MP defection is, however, fundamentally majoritarian as it confronts the decisions of individual MPs with the preferences of the majority of constituents.

We now extend the analysis of GK by employing a new dataset on politicians from the Swiss Upper House of Parliament. A major difference between the two houses is the electoral system: MPs from the Lower House are elected according to a proportional system (see GK,

¹ Comparing referendum and legislators' decisions in general is recommended by Matsusaka (2010), Portmann et al. (2012), and Stadelmann et al. (2012, 2013) as approach to evaluate overall congruence.

p. 3) while MPs of the Upper House are elected under a majoritarian system in the same electoral districts. Electoral systems determine the way individual politicians represent their constituents' preferences and who gets political credit for success or is blamed for defection (see, among others, Cox 1990, Lijphart 1994, Persson and Tabellini 2000, Powell 2000, Golder and Stramski 2010). We expect that majority-elected politicians face strong pressure to represent the electoral center independently of their interest groups as they need to appease the majority of their constituents. Proportionally-elected politicians, on the other hand, have more leeway to cater for different interests at the margins of the electoral spectrum such that different interest groups can have a systematic influence. We confront MP's parliamentary votes from the Upper House with referendum outcomes on identical issues and analyze whether sectional and cause groups affect MP defection.

Our results show that neither sectional nor cause groups explain defection of majority-elected politicians from their constituents' preferences at statistically significant levels. Point estimates suggest a close to zero impact of both types of interest groups on MP defection. This pattern even holds when using the identical data as GK for proportionally-elected politicians but focusing on MPs from districts with one or two seats, who are, in fact, elected by close to majority vote. Thus, our results suggest that the institutional setting, and, in particular, the electoral system, moderate the role interest groups play for political representation.

II. PARLIAMENTARY VOTES, REFERENDA AND INTEREST GROUPS

We assess the impact of interest groups on political representation by employing the same approach to classify sectional and cause groups as GK and we also combine legislative votes cast by MPs with voter preferences from Swiss referenda (similar to earlier contributions by Portmann et al. 2012 or Stadelmann et al. 2012, 2013). However, we do not analyze proportionally-elected MPs but employ a new dataset of majority-elected MPs.

Switzerland is an ideal case for investigating how interest groups shape the relationship between voters and politicians. First, Swiss MPs have to disclose all their interest affiliations in a public register which is easily accessible and referred to in media reports. Second, the

Swiss practice of submitting measures identical to those voted on by MPs to subsequent referenda allows to compare the behavior of constituents and their MPs on exactly the same issues (see Portmann et al. 2012, Carey and Hix 2013, Portmann 2014).² Referenda permit constituents to judge different policies and rank them against the status quo (see Frey 1994). Matching MP votes with referendum outcomes yields analytical leverage as instances in which MPs voted contrary to the revealed preferences of their constituents can be identified (see Garrett 1999).

The Swiss Parliament is made up of two houses, the *Nationalrat*/Lower House (analyzed in the study by GK) and the *Ständerat*/Upper House (analyzed in this study). The Lower House has 200 members who are elected under a proportional system. The Upper House has 46 members elected under a majoritarian system in the same electoral districts as MPs from the Lower House.³ Both houses have identical power in the legislative process, i.e. proposals have to pass both houses to be adopted and the formal requirements and prerogatives to be elected in the two houses are identical, apart from the electoral system.

While final votes in the Lower House are recorded by an electronic voting system, such a system has only been installed in the Upper House in spring 2014. Since winter 2006, however, a camera records the sessions⁴ of the Upper House and video streams are available on the internet such that voting behavior of MPs can be identified: MPs in the Upper House simply held up their hands which is observable on the video recording. We have collected and analyzed the video streams since the installation of the camera and thereby identify MP voting behavior in 1,963 cases for 57 different final votes which were subsequently presented to constituents in referenda between 2008 and 2014.⁵

² Hersch and McDougall (1988) and Brunner et al. (2013) apply this approach for the United States.

³ The only exception is the Canton of Jura which applies a proportional system. Citizens of the Canton of Neuchâtel voted in favor of changing the electoral system from majority voting to proportional representation on September 26, 2011. Omitting these politicians does not change the results.

⁴ Evaluations of final individual votes in the Upper House through the video streams were a topic ahead of the 2011 elections (e.g. NZZ am Sonntag, No. 35, 28.08.2011, p.15). Video data have been analyzed also by Stadelmann et al. (2012) to test the quality of the median voter model.

⁵ We also extended GK's dataset for the Lower House to 2014 (originally it contained referenda until 2009) and we replicate their results for the extended dataset and for the period we use for the Upper House from 2008 to 2014 in an Appendix.

Defection of an MP is measured by a dichotomous variable and occurs if the MP voted in the Upper House differently to the majority of her constituents. This way of measuring defection is identical to how GK measure MP defection.

We identify the interest affiliations from the official register for all MPs and we classify their affiliation the same way as GK into sectional and cause groups.

III. RESEARCH DESIGN AND RESULTS

Our research design is straightforward and directly comparable to GK: We explain defection of MPs from the majority of their constituents in Table 1. Defection is explained by the number of sectional and cause interest groups and we control for covariates. To give interest groups the best chance to exert an impact on defection, we start with a non-stringent setting in specification (1), include additional controls in specifications (2) to (4) and finally estimate a conservative full control, canton, party, and referendum consistent fixed-effects setting in specification (5).

Interest groups do not explain MP defection

Results of model (1) are from a multi-level logistic regression with random-effects for cantons (electoral districts) and parties as employed by GK but for the Upper House instead of the Lower House. We do not include any other variables apart from controls for referendum type (obligatory referendum, facultative referendum, and initiative as the omitted category). Results reveal that sectional and cause interest groups do not affect the extent of defection of majority-elected MPs. Point estimates are insignificant and close to zero.⁶

⁶ If we do not control for referendum types and if we do not account for random-effects for cantons and parties, the same results emerge: Interest groups do not affect defection of MPs.

Table 1: The Effect of Lobbying on Defection of MPs in the Upper House

DV: MP Defection					
	Model 1	Model 2	Model 3	Model 4	Model 5
Explanatory variables					
No. of sectional groups	0.004 (0.011)	0.005 (0.012)	0.013 (0.014)	0.012 (0.015)	0.010 (0.017)
No. of cause groups	0.0001 (0.015)	0.005 (0.015)	0.002 (0.020)	0.002 (0.021)	-0.002 (0.025)
Official party position congruence		-0.856*** (0.152)		-0.931*** (0.160)	-0.786*** (0.196)
Closeness of referendum		5.092*** (0.653)		5.204*** (0.662)	
Closeness of parliamentary decision		-0.363 (0.453)		-0.351 (0.459)	
No. of months until next election		0.002 (0.004)		0.002 (0.004)	
Obligatory referendum	-1.335*** (0.198)	-1.242*** (0.211)	-1.358*** (0.199)	-1.276*** (0.213)	
Facultative referendum	0.119 (0.111)	-0.041 (0.118)	0.120 (0.113)	-0.049 (0.120)	
Constant	-0.812*** (0.122)	0.423* (0.221)	-0.967 (0.596)	0.572 (0.644)	2.346** (0.964)
Random effects					
Canton-level variance	0.001	0.002			
Party-level variance	0.022	0.027			
Fixed effects					
Canton fixed-effects	No	No	Yes	Yes	Yes
Party fixed-effects	No	No	Yes	Yes	Yes
Referendum fixed-effects	No	No	No	No	Yes
Model fit					
N	1963	1963	1963	1963	1963
Log likelihood	-1135.879	-1089.089			
AIC	2285.758	2200.179			
BIC	2324.834	2261.583			
Pseudo R2			0.078	0.144	0.408
Chi-square			110.311*** (df = 36)	207.033*** (df = 40)	657.063*** (df = 87)

*** p < .01; ** p < .05; * p < .1

Logit coefficients are reported, with standard errors in parentheses. Results of Model 1 and 2 are from a cross-classified multilevel logistic regression glmer function in R. Results of Model 3, 4 and 4 are from consistent fixed-effects logistic regressions.

Model (2) controls for additional variables.⁷ Again, sectional and cause groups do not explain any defection MPs from their constituents. In contrast to the negative effect of cause groups of MPs of the Lower House shown by GK, we observe, if anything, twice a *positive* sign for sectional and cause groups on defection. While interest groups matter for defection of proportionally-elected MPs as evidenced by GK, neither sectional nor cause groups play a direct role for representation of constituents by majority-elected MPs; they face pressure to appease the electoral center independently of the number and the type of interest groups.

From a statistical point of view, party and canton fixed-effects correspond to a more stringent test than random-effects when analyzing the influence of interest groups on MP defection. Fixed-effects estimations do not require assumptions regarding the expected value of the coefficients for the fixed-effects and such estimations are consistent even if the true model is a random-effects model while the opposite does not hold true (see Cameron and Trivedi 2005). We take account of party and canton fixed-effects in Model (3) and (4). Again, neither sectional nor cause interest groups have any significant explanatory power on defection. Point estimates are close to zero. The difference between the coefficients for section and cause interest groups is not statistically significant. Calculating the discrete effect for doubling the median number of sectional groups (from 3 to 6 groups) and the median number of cause groups (from 3 to 6) yields twice a small *positive* but statistically insignificant change in the probability to defect of +0.785%-points and +0.126%-points, respectively. Adding one additional sectional group or one additional cause groups, increases defection by +0.261%-points and +0.041%-points.⁸

Finally, we include referendum fixed-effects in Model (5). This insures that neither differences between cantons, parties or referenda bias our coefficients of interest for sectional and cause interest groups. In particular, referendum fixed-effects take account of all differences

⁷ We do not include variables such as “No. of MPs per canton” into the estimation because they are only relevant for the proportionally-elected MPs analyzed by GK but not so for the majority-elected MPs from the Upper House analyzed here.

⁸ We calculate discrete effects applying the Delta-Method as suggested by Ai and Norton (2003) and all control variables are held at their median values.

between referenda such as salience, closeness, referendum types, etc. such that these controls and other potentially unobserved variables are fully accounted for which is a major advantage of fixed-effects settings. We find, once more, no statistically significant and quantitatively relevant effect of interest groups on MP defection.

Refinements and further tests

In Table 2, we refine our analysis and provide further evidence that defection of majority-elected MPs is not explained by their interest groups, be it sectional or cause groups.

Table 2: Refinements and further tests

DV: MP Defection						
	Model 1	Model 2	Model 3 (GK)	Model 4 (GK)	Model 5	Model 6 (GK)
Explanatory variables						
No. of all groups	0.003 (0.009)	0.009 (0.014)				
No. of sectional groups			-0.010 (0.016)	0.014** (0.006)	0.012 (0.018)	-0.004 (0.016)
No. of cause groups			-0.069 (0.065)	-0.033*** (0.009)	0.001 (0.025)	-0.029 (0.069)
No. of sectional groups (Party)					-0.004 (0.007)	-0.0004 (0.003)
No. of cause groups (Party)					-0.008 (0.009)	-0.005 (0.003)
Official party position congruence		-0.785*** (0.196)	-0.996*** (0.245)	-0.537*** (0.050)	-0.749*** (0.197)	-0.986*** (0.254)
Closeness of referendum			0.082*** (0.009)	0.031*** (0.002)		0.086*** (0.009)
Closeness of parliamentary decision			0.043*** (0.008)	0.043*** (0.002)		0.045*** (0.008)
No. of months until next election			-0.001 (0.005)	-0.003*** (0.001)		-0.002 (0.006)
Salience			-0.006 (0.007)	-0.003* (0.002)		-0.007 (0.007)
No. of MPs per canton				-0.001 (0.005)		-0.241 (0.209)
Obligatory referendum	-1.335*** (0.198)		0.164 (0.217)	-0.455*** (0.050)		0.175 (0.218)
Facultative referendum	0.120 (0.111)		-0.191 (0.180)	-0.530*** (0.041)		-0.215 (0.181)

Constant	-0.825*** (0.122)	2.214** (0.949)	2.383*** (0.405)	1.281*** (0.146)	2.334** (0.965)	3.103*** (0.604)
Random effects						
Canton-level variance	0.0001		0.040	0.212		0.033
Party-level variance	0.022		0.126	0.021		0.207
Fixed effects						
Canton fixed-effects	No	Yes	No	No	Yes	No
Party fixed-effects	No	Yes	No	No	Yes	No
Referendum fixed-effects	No	Yes	No	No	Yes	No
Model fit						
N	1963	1963	1078	19182	1963	1078
Log likelihood	-1135.86		-586.057	-10983.57		-583.86
AIC	2283.721		1196.114	21993.15		1197.72
BIC	2317.214		1255.909	22095.35		1272.463
Pseudo R2		0.408			0.409	
Chi-square		657.2*** (df = 86)			659.1*** (df = 89)	

*** p < .01; ** p < .05; * p < .1

Logit coefficients are reported, with standard errors in parentheses. Results of Model 1, 3, 4 and 6 are from a cross-classified multilevel logistic regression glmer function in R. Results of Model 2 and 5 are from consistent fixed-effects logistic regressions.

Models (1) and (2) show that the total number of interest groups, i.e. without distinguishing between sectional and cause groups, does not explain MP defection in the Upper House as opposed to MP defection in the Lower House (see Portmann et al. 2012).

MPs in the both Houses are elected in the same districts. District sizes vary in Switzerland between 1 and 34. Depending on population size, there are eight districts with one or two MPs in the Lower House. For MPs from these districts, electoral incentives are comparable to majority-elected MPs in the Upper House (see also the discussion in GK's conclusion, p. 13). We employ the identical dataset as used by GK but focus on a subset of districts with one or two seats. If electoral incentives shape the way interest groups affect MP defection and if our results are to be generalized, we should not find any statistically significant influence of sectional or cause groups for this subset of the MPs in the Lower House, who were, in fact, elected by close to majority vote. This is indeed the case as evidenced in Model (3): When restricting the sample to MPs in the GK dataset that can be compared to majority-elected politicians, interest groups do not explain defection from the majority's preferences. In Model

(4) we restrict the GK dataset to cantons with more than two representatives and we reestablish their quantitative and qualitative results: For proportionally-elected MPs sectional groups increase defection while cause groups decrease defection.

GK introduced in their analyses the aggregate number of interest groups per party. For completeness, we follow their approach in specification (5) and (6) for MPs of the Upper House and MPs of the Lower House from cantons with one or two representatives, respectively. In both settings, we do not observe any significant or quantitatively relevant effect of the number of sectional or cause groups of MPs or their parties on defection.

In an Appendix, we estimate GK's setting with an extended dataset (1996-2014 instead of 1996-2009 in their original contribution) and confirm the negative effect of cause groups on defection and a positive, though not statistically significant, effect of sectional groups on MP defection in the Lower House (Appendix 1).⁹ Appendix 2 focuses on the years 2008-2014 for the comparable period where data for the majority-elected Upper House is available. All coefficients for MPs from the Lower House exhibit the same sign as in GK, though coefficients are somewhat smaller, and the effects of the number of sectional and cause groups at the party level are statistically significant.

IV. CONCLUSIONS AND FUTURE RESEARCH RECOMMENDATIONS

Electoral systems do not only shape incentives for political representation but they may affect the way interest groups influence defection of MPs from constituent preferences. Majority-elected politicians need to appease the majority of their constituents independently of their interest groups while proportionally-elected politicians may cater for special interests.

In their inspiring contribution, GK show that sectional and cause groups influence the incentives for, and the extent of, defection of proportionally-elected MPs of the Swiss Lower House. Defection occurs if MPs' votes in parliament do not correspond to decisions of the

⁹ We coded interest group affiliation of MPs in the Lower House since 1996 and thereby extend the GK's dataset by six years and approximately one third of referenda.

majority of their constituents in a referendum on the identical legislative proposal. Having more ties to sectional interest groups increases MP defection, while having more ties to cause interest groups decreases defection according to GK.

In this contribution, we extend GK's analysis to new data for majority-elected MPs of Swiss Upper House employing otherwise an identical approach. As the employed measure of defection is fundamentally majoritarian, carrying the analysis from proportionally-elected MPs to majority-elected MPs is warranted, revealing and even suggested in GK's conclusions (p. 13). We show that interest groups, whether sectional or cause groups, *do not explain* defection of majority-elected MPs of the Upper House from their constituents. Our results suggests that, among others, electoral rules moderate the effect of interest groups on MP defection and they are in line with theoretical considerations regarding differences between proportional and majoritarian system.

GK's original results together with our extension opens new avenues for research. Further theoretical analyses on the interaction between electoral systems and the influence of interest groups promise new insights. The effect of interest groups on defection from voters seems to depend on the institutional setting and, in particular, on the electoral system. Moreover, the relationship between parties and interest groups needs to be explored as differences between proportional and majoritarian systems may also shape the effect that parties have on representation. Finally, we hope that future studies for other countries, different electoral systems and different institutional settings where interest group influence can be explored will stimulate further comparative research on this topic.

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Appendix Table A1: Replication of Table 3 (page 10) of GK for 156 referenda from 1996-2014

DV: MP Defection			
	Model 1 (extend GK)	Model 2 (extend GK)	Model 3 (extend GK)
Explanatory variables			
No. of sectional groups	0.004 (0.004)		0.001 (0.004)
No. of cause groups	-0.015*** (0.005)		-0.010* (0.005)
No. of sectional groups (Party)		0.004*** (0.001)	0.004*** (0.001)
No. of cause groups (Party)		-0.003*** (0.0005)	-0.002*** (0.0005)
Official party position congruence	-0.913*** (0.046)	-0.928*** (0.046)	-0.929*** (0.046)
Closeness of referendum	2.378*** (0.159)	2.364*** (0.162)	2.366*** (0.162)
Closeness of parliamentary decision	3.622*** (0.133)	3.636*** (0.135)	3.639*** (0.135)
No. of months until next election	-0.002* (0.001)	-0.001 (0.001)	-0.001 (0.001)
No. of MPs per canton	-0.004 (0.004)	-0.004 (0.004)	-0.004 (0.004)
Obligatory referendum	0.038 (0.044)	0.025 (0.044)	0.026 (0.044)
Facultative referendum	0.119*** (0.031)	0.107*** (0.031)	0.108*** (0.031)
Constant	1.206*** (0.134)	1.112*** (0.147)	1.124*** (0.147)
Random effects			
Canton-level variance	0.017	0.018	0.017
Party-level variance	0.199	0.265	0.263
Model fit			
N	26121	26121	26121
Log likelihood	-15276.52	-15257.52	-15255.68
AIC	30577.04	30539.03	30539.36
BIC	30675.08	30637.08	30653.75

*** p < .01; ** p < .05; * p < .1

Results are from a cross-classified multilevel logistic regression glmer function in R. Replication of GK for an enlarged dataset from 1996 to 2014 (instead of 1996 to 2009).

Appendix Table A2: Replication of Tably 3 (page 10) of GK for 57 referenda from 2008-2014

DV: MP Defection			
	Model 1 (extend GK)	Model 2 (extend GK)	Model 3 (extend GK)
Explanatory variables			
No. of sectional groups	0.001 (0.006)		0.003 (0.006)
No. of cause groups	-0.004 (0.006)		-0.005 (0.006)
No. of sectional groups (Party)		-0.004*** (0.001)	-0.004*** (0.001)
No. of cause groups (Party)		0.003** (0.001)	0.003** (0.001)
Official party position congruence	-0.399*** (0.071)	-0.406*** (0.072)	-0.405*** (0.072)
Closeness of referendum	1.312*** (0.258)	1.293*** (0.260)	1.294*** (0.260)
Closeness of parliamentary decision	3.277*** (0.235)	3.308*** (0.235)	3.308*** (0.235)
No. of months until next election	-0.004** (0.002)	-0.005*** (0.002)	-0.005*** (0.002)
No. of MPs per canton	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)
Obligatory referendum	-0.239*** (0.072)	-0.237*** (0.072)	-0.237*** (0.072)
Facultative referendum	0.004 (0.051)	0.008 (0.051)	0.008 (0.051)
Constant	0.480*** (0.145)	0.528*** (0.168)	0.537*** (0.169)
Random effects			
Canton-level variance	0.000	0.000	0.000
Party-level variance	0.137	0.186	0.184
Model fit			
N	9669	9669	9669
Log likelihood	-6051.705	-6046.91	-6046.523
AIC	12127.41	12117.82	12121.05
BIC	12213.53	12203.94	12221.52

*** p < .01; ** p < .05; * p < .1

Results are from a cross-classified multilevel logistic regression glmer function in R. Replication of GK for a dataset of 57 dataset which are also analyzed for majority-elected politicians (Table 1).