Strategic roll call vote requests*

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Abstract

Roll call vote analyses used to infer ideal-points of legislators or the cohesiveness of parties all implicitly assume that the data-generating process leading to such votes is random. If roll call votes, however, are requested by party leaders or MPs, this assumption is unlikely to hold. Strategic considerations by the actors requesting roll calls are likely to influence the inferences we wish to make based on observed voting behaviors by legislators. To address this issue we propose a strategic estimator for roll call vote requests and apply it to data on roll call vote requests from the Swiss lower house. We find that strategic considerations play a considerable role in roll call vote requests.

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1 Introduction

The analysis of roll call votes has progressed both in terms of sophistication and in scope over the last few decades. On the one hand new tools make using roll call data easier and theoretically more insightful. On the other, parliaments make with increasing frequency information on parliamentary votes available. Often, however, it is forgotten that roll call votes in most parliaments have to be, at least in part, requested by an actor (e.g., Hug, 2010; Crisp and Driscoll, 2012; Hug, Wegmann and Wüest, 2015). So far, however, we know very little about when, if the standing orders of parliaments permit it, roll call votes are requested. In an early study Fennell (1974) surmises some possible "reasons," while Carrubba, Gabel and Hug (2008*a*) present a game-theoretic analysis of roll call vote requests (see also Ainsley and Maxwell, 2012; Wüest, 2013).

The few studies that focus on the reasons of roll call votes explicitly emphasize that actors requesting such votes do so for strategic reasons. At the empirical level, however, tests most often focus on evaluating observable implications quite removed from actual roll call vote requests and/or neglecting their strategic nature. To our knowledge only Chiou and Yang (2008) offer an empirical analysis taking into account the strategic nature of roll call vote requests in the Taiwanese legislature.

In the present paper we propose to extend their analysis to a study of the Swiss lower house. This extension is especially useful, as for some legislative periods individual voting data is available for votes carried out in secret (see Hug, 2010). As for one of these legislative periods also information on roll call vote requests is available, the combination of the two will allow for much more detailed insights into the consequences of strategic roll call vote requests.[1]

In the next section we briefly review work on roll call votes generally and roll call vote requests more specifically. Based on the work discussed we offer some expectations about what elements should affect the strategic request for roll calls. In section three we present the data we use in our empirical analysis, as well as the methods on which we rely to take into account the strategic nature of roll call vote requests. Section four presents our results, before we conclude and sketch

[1]Combining these two endeavours is the next step in our project, as we discuss in the conclusion. Hug and Wüest (2014) offer a first glimpse at the consequences of roll call vote requests on party pressure for this legislative period of the Swiss lower house.

out the future avenue of research in section five.

2 Roll call vote requests

The study of roll call votes in parliaments has seen important developments over the last few decades (for recent reviews, see McCarty, 2011; Hug, 2013; Carroll and Poole, 2014; Hug, 2016 (â paraître)). This development has profited on the one hand from methodological developments (for excellent overviews, see Poole, 2005; McCarty, 2011; Armstrong, Bakker, Carroll, Hare, Poole and Rosenthal, 2014) and on the other by the increasing ease with which roll call data can be collected (which is linked in part to the introduction of electronic voting systems in parliaments, see Middlebrook, 2003; Hug, Wegmann and Wüest, 2015). Having access to datasets on roll call votes from various parliaments also increased the interest in comparative work (e.g., Depauw, 2003; Carey, 2009; Depauw and Martin, 2009; Feliú and Onuki, 2014; Coman, 2015; Hix and Noury, 2015 (forthcoming)). Such work, however, is fraught by difficulties due to differences in the rules under which roll call votes may occur. Such differences are also likely to affect the inferences we may draw from roll call data (see Roberts, 2007; Hug, 2010, 2016 (forthcoming)).

Whether roll call votes are even possible depends in most parliamentary chambers on their standing orders. As several authors have convincingly shown (Saalfeld, 1995; Carrubba, Gabel and Hug, 2008*a*; Hug, 2010; Crisp and Driscoll, 2012; Hug, Wegmann and Wüest, 2015), few chambers envision that all votes are carried out by roll call votes (or open voting). Equally few chambers envision no circumstances under which roll call votes might be possible. Already these institutional differences are of interest, and Carey (2009) argues that they relate to questions of transparency (for an empirical analysis of voting procedures as defined in the standing orders of European parliaments, see Hug, Wegmann and Wüest, 2015). Many standing orders of parliamentary chambers envision requests for roll call votes (for information regarding this point for Latin American and European parliamentary chambers, see Crisp and Driscoll, 2012; Hug, Wegmann and Wüest, 2015) and as a consequence, it seems of tantamount importance to understand under what circumstances such requests are made. Only then will we be able to assess the consequences for analyses of roll call vote data.

In an early study Fennell (1974) offers a list of possible reasons why roll call

votes might be requested. In a similar vein, focusing on the European parliament Thiem (2009), Finke (2015 (forthcoming)) and Thierse (2016 (forthcoming)) offer and evaluate a list of hypotheses.[2] At a theoretical level Carrubba, Gabel and Hug (2008*a*) propose a model under the assumption that roll call vote requests are made by leaders of party groups for disciplining purposes. Their model suggests that the location of the bill and the status quo, as well as preference heterogeneity in party groups combine in complex ways in explaining roll call vote requests.[3] Ainsley and Maxwell (2012) focus in their theoretical model mostly on the idea that roll call vote requests are made to signal preferences or unity (resp. disunity) of party groups. Their model implies, however, that if signaling is the motivation behind roll call votes, all votes should be roll called. Finally, Wüest (2013) argues that roll call vote requests must be considered as the result of the interplay of constituency and party preferences and how they relate to MPs' preferences. Akin to Ainsley and Maxwell's (2012) approach, MPs may gain electorally if they take a stance in a roll call vote (or do so, invisibly, in a secret vote).

While all these studies either explicitly, by using a game-theoretic approach, or implicitly assume that roll call vote requests are the outomce of a strategic interaction among various actors, the empirical evaluations do only partly account for this. To our knowledge the study by Chiou and Yang (2008) on roll call vote requests by the two main parties in the Taiwanese legislature is the only excpetion. More specifically, based on an extensive data collection the authors assemble detailed measures of various aspects likely to be important in the calculus of parties when deciding to request a roll call vote. Relying on the general ideas of quantal response equilibria proposed by McKelvey and Palfrey (1995, 1998) for analyzing experimental data and extended to observational data by Signorino (1999) (see also Signorino, 2002; Signorino, 2003; Signorino and Yilmaz, 2003; Signorino and Tarar, 2006) Chiou and Yang (2008) propose estimators applicable for a sequential and a simultaneous moves game. They find that the requests for roll call votes by the two main parties in the Taiwanese legislatures are exhibiting considerable interdependence and follow, in part, different logics.[4]

[2]Relatedly, Trumm's (2015 (forthcoming)) tries to assess through an MP survey whether MPs are likely to vote differently in a roll call vote than in other votes (see also Hix, Noury and Roland, 2012; Mühlböck and Yordanova, 2015; Hug, 2016).

[3]In a preliminary empirical evaluation focusing on the European parliament Carrubba, Gabel and Hug (2008*b*) find considerable evidence in support of their model.

[4]To our knowledge all other empirical studies of roll call vote requests either assess only losely

3 Data and methods

While the study by Chiou and Yang (2008) is innovative in its estimation technique, the data available for the legislature they study, i.e., the Taiwanese parliament, does not allow to assess the consequences of these strategic considerations in roll call vote requests. Data from the lower house of the Swiss parliament enables us to overcome this limitation, as for several legislative periods we have voting information for both roll call votes and secret votes (Hug, 2010). More specifically, in this paper we will first offer an application of Chiou and Yang's (2008) estimation strategy to another parliament, namely the Swiss lower house. In a latter stage (see discussion) we will use this estimation to consider whether this strategic estimation allows us to better come to grips with the consequences of roll call vote requests on party discipline and other behavioral aspects. So far such analyses have either relied on simple models based on comparative statics (Carrubba, Gabel and Hug, 2008*b*) or employed Heckman (1976) selection models with largely atheoretic specifications (Hug, 2010). As the Swiss parliament has a multiparty composition (compared to a largely bipartisan one of the Taiwanese legislature), and the government comprises all large parties, our empirical analysis will also assess the robustness of Chiou and Yang's (2008) estimation strategy. While in Taiwan roll call vote requests are embedded in a fixed government-opposition dynamic, due to the grand coalition in Switzerland, this dynamic is more fluid (as all large parties are represented in government and, as we will see, a majority of roll call vote requests come from governmental parties).

Thus, for the empirical analysis we will rely on data from one legislative period from the Swiss lower house of parliament. This chamber introduced in 1996 an electronic voting system recording all votes. Until 2007, however, only final passage votes, votes on urgent measures and those related to the debt-brake were published in addition to those requested by 30 MPs.[5] Unfortunately, the identity of roll call vote requesters is not recorded in the minutes of the parliament. For one legislative period, i.e., between 2003 and 2007, we were able to locate an

connected hypotheses (e.g., Fennell, 1974; Thiem, 2009; Stecker, 2010; Finke, 2015 (forthcoming)) or assess comparative statics results (e.g., Carrubba, Gabel and Hug, 2008*b*).

[5]The full voting recorded, i.e., even those votes not published, can be requested for scientific research (see Hug, 2010). The upper house, until recently (for a discussion of the changes recently introduced and a first assessment of the consequences, see Bütler, Benesch and Hofer, 2015), voted by show of hands and had only very few roll call votes (see Bütikofer and Hug, 2010; Bütikofer, 2014).

(unfortunately) incomplete set of signature files submitted to request roll call votes. First of all, we have these signature files only for 14 of the 17 sessions in this legislative period. Second, even for these 14 sessions, not all signature files were archived.[6] Third, as the signature files only in part mention the name of the party requesting a roll call vote, we attempted to match each signature to an MP. This proved difficult, but together with the partisan requests we were able to determine for 208 requested roll call votes who lodged the request. In 15 cases two parties each separatedly requested a roll call vote, while for 195 votes the signatures did not allow us to assign a roll call vote request uniquely to a party.[7]

As we do not have a complete coverage of all roll call vote requests for a full legislative period, we need to select the set of votes to cover in our analysis of roll call vote requests. In the analyses that follow we selected from the full voting record all votes related to bills for which we have at least one signature file requesting a vote. For all these 136 bills we retained all votes, eliminated, however, those that were automatically published in the minutes, as a roll call vote request in these votes is inconsequential (and by consequence has never occurred).[8] This results in a total of 1768 votes which, potentially could have been roll called. Of these, 1299 were not roll called. Of the remaining 469 votes 34 were roll called, but we were unable to locate the signature file. For 195 other votes, deciphering the signatures did not allow to assign the request to a party. Which leaves us with 208 votes for which we have at least one request for a roll call vote by a party. 136 (15 with other parties) were submitted by the social-democratic party (SPS), 65 (14 with the SPS) by the Swiss people's party (SVP), 20 (1 with the SPS) by the christian-democrats (CVP) and 2 by the liberal party (FDP).

Following Chiou and Yang (2008) we consider roll call vote requests as the outcome of a strategic game, implying that empirical analyses need to take into account this strategic nature. As several parties can request roll call votes the

[6] We have no reason to believe that the missing signature files are not missing completely at random.

[7] One signature file mentioned explicitly two parties. As the smaller of these parties (the Green party) did not request any other roll call vote, we assigned this request to the larger party (the social-democrats).

[8] Another way to proceed would be tolimit the analyses to votes having occured on days for which we have at least one signature file for a roll call vote requests. Initial, preliminary analyses suggest that the substantive results reported below are not affected by this alternative selection rule.

issue is whether these requests are made in some sort of sequence or if they are made simultaneously. While for sequential models Signorino and Tarar (2006), following Signorino's (1999, 2003) precursor work on strategic estimations, provide general tools (including an R-package on which we will rely below)), estimators for simultaneous games are not easily available. Drawing on Camerer, Nunnari and Palfrey (2011) and the precursor work by McKelvey and Palfrey (1995, 1998) Chiou and Yang (2008) propose a setup allowing the estimation of a model with simultaneous requests for roll call votes (r). For a set of votes N indexed by i and a set of parties P indexed by j the likelihood of observed roll call votes is the following:

$$L = \prod_i (\prod_j (1 - p_{ij}))^{(1-r_i)} \times (1 - \prod_j (1 - p_{ij}))^{(r_i)} \quad (1)$$

As the choice of a roll call vote by a party j for a particular vote i ($p_{ij} = p(r_{ij} = 1)$ depends on the utility of a roll call vote and is in a relation of interdependence with the decisions of the other parties, Chiou and Yang (2008) assume the following for each party k:

$$\begin{aligned} EU_{ik}(r_{ik} = 1) &= 0 \\ EU_{ik}(r_{ik} = 0) &= 0 \times (1 - \prod_{j \neq k} (1 - p_{ij})) + u_{ik}(r_i = 0) \times \prod_{j \neq k} (1 - p_{ij}) \end{aligned} \quad (2)$$

This setup implies that the utilities for all parties for a roll call vote are standardized to 0. Consequently, for each party a request for a roll call vote automatically generates expected utilities equal to 0. The utility related to the absence of a roll call vote $u_{ik}(r_i = 0)$ may differ from 0, which implies that not requesting a roll call vote generates for party k a lottery with the expected utility as specified in the second part of equation 2. Together with the likelihood function specified in equation 1 this setup allows us to asses what affects the utility of not having a roll call vote for each party. As equation 2 implies a best-response correspondence we use an expectation-maximization (EM) algorithm as explained below. [9]

[9]For tractability purposes we assume that the errors are agent specific and uncorrelated. We make the same assumption for the sequential moves games.

We use this setup as well as the one of a sequential move game to assess what affects roll call vote requests by the three parties in the Swiss lower house having requested almost all roll call votes. We consider three sets of variables that we assume to affect the utility of not having a roll call vote. First, it seems obvious that the importance of a particular topic should affect a party's decision to request a roll call vote. For instance, a party might want for votes on a topic that is highly salient for it to show in a public vote what positions it defends and how united it is. This leads us to expect that the likelihood of requests for roll call votes should be higher for issues that are salient for a party.[10]

Second, we consider who is behind a particular bill or proposal. In our dataset we have both bills submitted to parliament by the government and private member bills and proposals by party groups. The government between 2003 and 2007 was a grand coalition with government members from four different parties, namely the social-democrats (SPS), the liberal party (FDP), the Swiss people's party (SVP) and the christian-democrats (CVP).[11] All these parties had each two ministers in the government except the last party. Consequently, we assume that for proposals that are dealt with by a minister of a particular party the likelihood of a roll call vote request is higher. Similarly, if a private member bill (either by an individual or a party group) is proposed, this should equally increase the likelihood of a roll call vote request. Both of these expected effects rely primarily on the assumption that roll call votes are used for disciplining purposes. In both of these cases a party has high stakes in winning a vote, and roll call votes, by allowing disciplining measures, increase these chances.Needless to say, one might also argue that in these cases a party might request a roll call vote for signalling its position. Finally, while the previous variables are all party-specific by bill, we consider also one vote-specific variable, namely whether or not the vote had a procedural character (e.g., opening debates, etc.). We assume that such votes should be more often roll called.[12]

[10]The appendix offers information on the data we use as well as descriptive statistics of all variables used in the main text.

[11]Table 5 in the appendix provides information on the government composition and the portfolio allocation.

[12]We explored some other bill-specific variables as well, but most likely due to the fact that these induce a hierarchical data sructure, we encountered estimation problems. These variables, stemming from Sciarini, Nicolet and Fischer's (2002) database on decision-making procedures (see also Sciarini, 2014), covered whether a bill was possibly subject to a referendum and whether the government organized a preparliamentary consultation phase for the proposal.

4 Results

In tables 1 and 2 we report the results from our estimations base on sequential moves model. As there is no natural order of moves, we permutate all three parties in the sequence of possible roll call vote requests.[13] As the tables show, the substantive results are hardly affected by the "order of play" that we assume. First, we find a robust effect for the salience of particular issues. More specifically, both for the social-democrats and the christian-democrats higher saliency decreases (negative coefficient) the likelihood that these two parties will not request a roll call vote. Surprisingly, however, the effect for the populist SVP is positive, implying that this party requests with higher probability roll call votes on issues that are less salient according to its media appearances.

Regarding the party group (or minister) responsible for a proposal we find mixed effects. For the social-democrats we find the expected effect, namely that this party requests roll call votes with higher frequency on proposals coming from its ministers or that its private members have submitted on the floor. As the tables show, not all of these effects are precisely estimated, and we can not systematically reject the null hypothesis of no effect. For the populist SVP we find a considerable negative effect for proposals stemming from its party group. These are much more likely to be roll called by the party. On the other hand regarding proposals coming from its two ministers, we find a positive, but statistically insignificant effect. For the remaining christian-democratic party we face a problem of complete separation regarding these variables and thus omitted both indicators from the models. Regarding the vote-specific effects we do not find a general pattern. The only exception is that the populist SVP requests much more frequently roll call votes for procedural votes.

[13] We omitted those votes for which we could not identify the party requesting the roll call vote, as well as the two votes roll called by the FDP.

	sequential: S V C			sequential: S C V			sequential: V S C			sequential: V C S		
	$u_s(r=0)$	$u_v(r=0)$	$u_c(r=0)$	$u_s(r=0)$	$u_c(r=0)$	$u_v(r=0)$	$u_v(r=0)$	$u_s(r=0)$	$u_c(r=0)$	$u_v(r=0)$	$u_c(r=0)$	$u_s(r=0)$
salience$_S$	−0.04			−0.04				−0.03				−0.03
	(0.01)			(0.01)				(0.01)				(0.01)
proposing minister$_S$	−0.16			−0.14				−0.30				−0.28
	(0.21)			(0.22)				(0.20)				(0.19)
proposing party group$_S$	−1.06			−1.05				−0.80				−0.56
	(0.46)			(0.46)				(0.40)				(0.36)
salience$_V$		0.05			0.04	0.04			0.04			
		(0.01)				(0.01)	(0.01)			(0.01)		
proposing minister$_V$		0.21				0.30	0.11			0.120		
		(0.19)				(0.19)	(0.21)			(0.21)		
proposing party group$_V$		−2.15				−1.78	−2.50			−2.50		
		(0.56)				(0.49)	(0.65)			(0.65)		
salience$_C$			−0.06		−0.07				−0.059		−0.05	
			(0.02)		(0.02)				(0.02)		(0.02)	
procedural vote	0.14	−1.20	−0.66	0.23	−0.03	−1.32	−0.86	−0.48	−0.70	−0.84	−0.57	−0.54
	(0.46)	(0.33)	(0.48)	(0.49)	(0.64)	(0.31)	(0.40)	(0.33)	(0.48)	(0.40)	(0.61)	(0.32)
(Intercept)	2.47	2.07	3.54	2.47	3.77	2.02	2.401	2.30	3.53	2.40	3.80	2.30
	(0.12)	(0.13)	(0.20)	(0.12)	(0.21)	(0.13)	(0.15)	(0.11)	(0.20)	(0.15)	(0.21)	(0.11)
Log-likelihood		−748.73			−748.39			−753.454			−755.074	
N		1539			1539			1539			1539	

Standard errors in parentheses

Table 1: Sequential moves (SVC, SCV, VSC, VCS) estimations

	sequential: C S V			sequential: C V S			simultaneous		
	$u_c(r=0)$	$u_s(r=0)$	$u_v(r=0)$	$u_c(r=0)$	$u_v(r=0)$	$u_s(r=0)$	$u_s(r=0)$	$u_v(r=0)$	$u_c(r=0)$
salience$_S$		−0.04				−0.03	-0.04		
		(0.01)				(0.01)	(0.01)		
proposing minister$_S$		−0.10				−0.25	0.02		
		(0.21)				(0.19)	(0.29)		
proposing party group$_S$		−0.73				−0.55	-0.38		
		(0.41)				(0.36)	(0.49)		
salience$_V$			0.04		0.04			0.05	
			(0.01)		(0.01)			(0.01)	
proposing minister$_V$			0.31		0.20			0.13	
			(0.19)		(0.20)			(0.17)	
proposing party group$_V$			−1.71		−2.11			-1.66	
			(0.48)		(0.56)			(0.48)	
salience$_C$	−0.06			−0.05					-0.06
	(0.02)			(0.02)					(0.03)
procedural vote	0.06	0.14	−1.28	0.01	−0.95	−0.53	-0.05	-0.97	-16.33
	(0.74)	(0.45)	(0.31)	(0.73)	(0.38)	(0.32)	(0.43)	(0.23)	(62.42)
(Intercept)	4.04	2.43	2.03	4.01	-1.90	2.29	-1.96	1.27	2.63
	(0.23)	(0.12)	(0.13)	(0.22)	(0.15)	(0.11)	(0.13)	(0.10)	(0.39)
Log-likelihood		−750.82			−755.42			−572.91	
N		1539			1539			1539	

Standard errors in parentheses

Table 2: Sequential moves (CSV, CVS) and simultaneous moves estimations

In the last part of table 2 we report the results from the estimation of the simultaneous moves game. This model, as it implies best responses by the three parties, was estimated with an expectation-maximization algorithm. More specifically, the parameters for each party were estimated separatedly while holding the probabilities of roll call vote requests by the other parties fixed. Based on these estimates predicted probabilities of roll call vote requests were generated and the estimations carried out seperatedly again for each party. This was iterated until the value of the likelihood function at the maximum no longer changed.[14] The results of these estimations are largely similiar, with a few exceptions, however. First, the simultaneous moves estimations yield largely similar results for the saliency measure. Again, higher salience for the SP and the CVP increase the likelihood that they request a roll call vote. In contrast to the sequential moves estimations, however, the latter effect is no longer statistically significant. On the other hand, higher salience for the SVP decreases its probability to request a roll call as before. The variables linked to the proposing actor of a bill shows that only those stemming from the SVP party group have a higher probability of being roll called. For this same party we also find a higher probability of a roll call vote request if the vote was on procedural matters.

It is useful to compare these estimates with naive probit and multivariate probit estimates. Table 3 reports these results. First, the results suggest that even though we find considerable evidence for correlations in the error terms in the multivariate probit model, namely mostly for those of the SP and the SVP, the estimated substantive effects do not differ across the probit models. Regarding the impact of salience we find the same pattern as the one found in the sequential moves specification. Consequently, even the salience measure for the CVP increases the likelihood that this party requests a roll call vote. Regarding the proposing actor, we find again a significant effect for proposals coming from the SVP party group. Compared to the results reported in tables 1 and 2 we find, however, also a positive, statistically significant effect for the proposals stemming from the SP party group. Procedural votes, again, are more frequently roll called by the former party.

It is useful at this stage to summarize the results and put them in perspective. The results from the binary probit models, based on the assumption that the three

[14] We used a tolerance value of 0.001.

	binary probit			multivariate probit		
	$r_S = 0$	$r_V = 0$	$r_V = 0$	$r_S = 0$	$r_V = 0$	$r_C = 0$
salience_s	-0.03***			-0.02***		
	(0.01)			(0.01)		
$\text{proposing minister}_S$	-0.11			-0.10		
	(0.13)			(0.13)		
$\text{proposing party group}_S$	-0.61**			-0.63**		
	(0.30)			(0.30)		
salience_V		0.02***			0.02***	
		(0.01)			(0.01)	
$\text{proposing minister}_V$		0.12			0.10	
		(0.13)			(0.13)	
$\text{proposing party group}_V$		-1.53***			-1.50***	
		(0.42)			(0.41)	
salience_C			-0.04***			-0.04***
			(0.01)			(0.01)
procedural vote	-0.15	-0.72***	-0.41	-0.17	-0.74***	-0.40
	(0.22)	(0.21)	(0.33)	(0.21)	(0.21)	(0.33)
Constant	1.58***	-1.56***	2.54***	1.57***	1.58***	2.53***
	(0.08)	(0.09)	(0.14)	(0.08)	(0.10)	(0.14)
at(ρ)					0.26***	-0.15
					(0.08)	(0.14)
at(ρ)						-0.06
						(0.14)
Log-likelihood	−447.63	−251.48	−99.19		−791.94	
N	1539	1539	1539		1539	

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 3: Binary and multivariate probit

parties decide independently of each other on roll call vote requests, yield, at the substantive level, identical results as those from the multivariate probit model. The notable correlation among the error terms for the SP and SVP is probably largely induced by the fact that these two parties requested fifteen times roll call votes on the same vote. The only substantive difference compared to the sequential moves results, obtained under the assumption of interdependence of choices, is that votes on proposals by the SP party group are no longer more likely to be roll called. Consequently, this effect appearing in the naive probit estimations is an artefact that stems from ignoring the interdependence of the parties' choices, and even a multivariate probit specification is unable to address this issue. Finally, the estimations from the simultaneous moves model suggest that the sequential estimations (and the probit estimations) falsely suggest that the salience of a proposal positively affects the likelihood that the CVP requests a roll call vote. More specifically, while we still find a positive effect, based on the uncertainty in the estimation of this coefficient we can no longer reject the null hypothesis.

These results offer already some evidence in favor of strategic estimations when considering the requests of roll call votes by political parties. We also find evidence that assuming simultaneous moves yields different results than the commonly employed sequential moves setup. As noted above, however, for a considerable set of roll call vote requests we could not clearly assign the request to a specific party. As we left these votes out of the dataset, it might be that this decision affects the results we found. To address this issue we estimate an additional version of the simultaneous moves model, to which we add a fourth player, namely a non-specific party group (N).[15] This allows us to cover all votes related to bills which were the object of at least one roll call vote request.[16]

For the roll call vote requests by the three formerly studied party groups we use exactly the same independent variables. For the requests by a non-specific party group we combine these independent variables and add the ones we had to leave aside for the CVP due to problems of complete separation. Consequently, we use saliency measures for the four governmental parties, information on the proposing actor coded again for these four parties and finally the indicator variable concerning procedural votes.

[15]For simplicity's sake we also assigned the two roll call vote requests by the liberal FDP to this non-specific party group.

[16]Another strategy, which we will explore later, consists of changing the dependent variable to comprise roll call vote requests also by non-specific party groups and estimate a model with only three actors.

	probit	probit	probit	probit	multivariate probit				simultaneous moves			
	$u_s(r=0)$	$u_v(r=0)$	$u_c(r=0)$	$u_N(r=0)$	$u_s(r=0)$	$u_v(r=0)$	$u_c(r=0)$	$u_N(r=0)$	$u_s(r=0)$	$u_v(r=0)$	$u_c(r=0)$	$u_N(r=0)$
salience$_S$	-0.02***			0.01	-0.02***			0.01	-0.15***			0.01
	(0.01)			(0.02)	(0.01)			(0.02)	(0.04)			(0.02)
proposing minister$_S$	-0.13			0.46***	-0.13			0.42***	-4.16***			1.22***
	(0.13)			(0.15)	(0.13)			(0.15)	(1.13)			(0.33)
proposing party group$_S$	-0.12			-1.23***	-0.13			-1.24***	0.44			-0.94***
	(0.25)			(0.26)	(0.25)			(0.26)	(1.72)			(0.32)
salience$_V$		0.02***		-0.01		0.02***		-0.01		0.02		-0.03***
		(0.01)		(0.01)		(0.01)		(0.01)		(0.02)		(0.01)
proposing minister$_V$		0.10		0.29**		0.06		0.28**		8.59		0.08
		(0.13)		(0.14)		(0.13)		(0.14)		(9.57)		(0.16)
proposing party group$_V$		-1.13***		-0.84**		-1.05***		-0.91***		-2.42***		-0.89
		(0.35)		(0.34)		(0.35)		(0.34)		(1.04)		(2.01)
salience$_C$			-0.04***	-0.00			-0.04***	-0.00			-0.01	0.02
			(0.01)	(0.02)			(0.01)	(0.02)			(0.02)	(0.02)
proposing minister$_C$				-0.22				-0.01				0.18
				(0.16)				(0.02)				(0.22)
proposing party group$_C$				-1.05**				-1.07**				-0.98
				(0.53)				(0.53)				(0.65)
salience$_R$				0.00				0.00				-0.04***
				(0.01)				(0.01)				(0.02)
proposing minister$_R$				0.25				0.23				0.26
				(0.16)				(0.15)				(0.20)
proposing party group$_R$				-0.46				-0.42				-0.42
				(0.29)				(0.29)				(0.34)
procedural vote	-0.06	-0.60***	-0.36	-0.59***	-0.06	-0.61***	-0.36	-0.58***	1.28	-0.77	51.96	-0.55
	(0.21)	(0.20)	(0.32)	(0.17)	(0.21)	(0.195)	(0.321)	(0.170)	(0.35)	(0.65)	(90.21)	(0.34)
Constant	1.63***	-1.63***	2.57***	1.09***	1.63***	1.64***	2.58***	1.09***	5.74***	2.08***	1.88***	0.78***
	(0.07)	(0.09)	(0.14)	(0.12)	(0.07)	(0.09)	(0.14)	(0.12)	(1.20)	(0.28)	(0.14)	(0.14)
at(ρ)						0.27***	-0.021	-0.34***				
						(0.08)	(0.14)	(0.07)				
at(ρ)							0.10	-0.23***				
							(0.17)	(0.08)				
at(ρ)								-0.07				
								(0.89)				
log-likelihood	-467.73	-262.70	-101.88	-570.76			-1382.27				-878.61	
N	1736	1736	1736	1736			1736				1736	

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4: Probit, multivariate probit and simultaneous moves: 4 actors

In table 4 we first report the results of naive probit and multivariate probit models, before reporting those of the simultaneous moves estimator. Comparing the results of the three probit models and the corresponding estimates from the multivariate probit with those reported in table 3 suggests that adding the roll call vote requests not assigned to a particular party does not affect our results. More specifically, we find again that saliency has a positive effect, resp. negative, on roll call requests by the SP and CVP, resp. the SVP. In addition, for the latter party proposals made by itself in parliament as well as procedural votes are much more likely to be roll called. When we consider what affects the likelihood of a roll call vote requests by a non-specific party group we find that the salience for each of the governmental parties does not matter. On the other hand the identity of the proposing party matters considerably. Those proposed by an SP or SVP minister are much less likely to be roll called, while those made by governmental party groups are systematically more likely subject to a roll call vote request. All these effects are statistically significant, with the single exception of the coefficient for proposals by the FDP party group.

When we consider the estimates generated with the simultaneous moves estimator we note a series of differences. First, while in the naive probit estimations we found no evidence for an effect for proposals made by an SP minister, we now find a considerable positive effect on the likelihood of a roll call vote request by this party. Second, while in the former models the saliency for the SVP affected negatively this party's likelihood of requesting a roll call, this is no longer the case for the simultaneous moves estimates. Vice-versa, the SVP's salience increases, according to these latter estimates, the likelihood of a roll call vote request by a non-specific party group, which was not the case according to the naive probit estimates. Third, while these latter estimates suggest that the CVP requests roll call votes on issues salient to itself, this is no longer the case for the simultaneous moves estimates. Fourth, while proposals by the CVP party are more likely to lead to roll call vote requests by this same party, this effect is no longer significant in the strategic estimation. Fifth, and finally, while the saliency accorded by the FDP to a particular proposal appeared to have no effect on the likelihood of a roll call vote request by a non-specific party group according to the probit estimates, the results of the last model in table 4 suggest that this saliency increases the likelihood of such roll call vote requests.

5 Conclusion

Roll call votes offer important insights on parliamentary work and members of parliament. What exactly can be inferred from such votes depends, however, on the circumstances under which roll call votes occur. In many parliaments roll call votes are preceeded by a request, and the latter may well affect the voting behavior by MPs that we observe. To assess these effects solid theoretical foundations and appropriate empirical tools are necessary.

In this paper we took a first step by applying a strategic estimator as developped by Chiou and Yang (2008) to a new context. More specifically instead of dealing with an essentially two-party legislature with a clear government-opposition dynamic, as in Taiwan, we focused on a multi-party system with a grand coalition in government, namely Switzerland. As our results, based on a rather sparse specification of our empirical model, suggest, also in this context a strategic estimation allows for additional insights, especially if we assume that decisions for requesting roll call votes are made simultaneously. We found consistent, though contrasting, effects for the saliency of particular proposals, and as well some effects regarding the authorship of a proposal and a vote characteristic.

As mentionned above, the empirical specification of our models is still rather sparse. Compared to the one used by Chiou and Yang (2008) more vote- and bill-specific information is needed. Consequently, our future specifications will include information stemming from the parliamentary debates (for a recent analysis of speeches in the Swiss parliament, see Schwarz, Traber and Benoit, 2014 (forthcoming)) yieding information on how important a proposal is for the party leadership, etc.

In addition to this improved specification of the empirical model, a more substantial additional step consists of linking the model used here with analyses focusing on the behavioral aspects in roll call votes. More specifically, the estimation proposed here might be employed as a first stage in a Heckman (1976) type selection model when assessing what affects the cohesion of political parties. Similarly, it might be used to improve ideal-point estimations, if it were to transpire that roll call vote requests generate a skewed and/or uneven distribution of cut-points (for evidence supporting this idea for the same set of votes, see Hug and Wüest, 2014). Consequently, the present paper and the analyses presented here are a first step in addressing the important issue of how the strategic nature

of roll call vote requests affects the inferences we can draw from such data.

Appendix

Basic data

The starting point of our data is the complete roll call vote database for the 2003-2007 levislative period and its information on all votes. As explained in the main text and documented in more detail in Hug and Wüest (2014) information on roll call vote requests was added to this basic information. For the salience of particular bills and proposals we follow Traber, Hug and Sciarini's (2014) coding based on the data collected by Kriesi, Grande, Lachat, Dolezal, Bornschier and Frey (2008) on the election campaign in 2003 in newspapers.

Additional data: ministers

Based on the information on the bill in our database we assigned both proposing ministers and proposing party groups based on the information obtained from the Swiss Parliament's Curia Vista database (`http://www.parlament.ch/f/suche/Pages/curia-vista.aspx`). Table 5 lists the ministers and their party affiliation for the time period covered by the data used in this paper.

Department (official abbreviation)	minister 1 (start date, party)	minister 2 (start date, party)
Département fédéral de justice et police (DFJP)	Blocher, Christoph (2004, V)	
Département fédéral de l'économie (DFE)	Deiss, Joseph (2004, C)	Leuthard, Doris (June 14, 2006, C)
Département fédéral de l'environnement, des transports, de l'énergie et de la communication (DETEC)	Leuenberger, Moritz(2004, S)	
Département fédéral de l'intérieur (DFI)	Couchepin, Pascal (2004, R)	
Département fédéral de la défense, de la protection de la population et des sports (DDPS)	Schmid, Samuel (2004, V)	
Département fédéral des affaires étrangères (DFAE)	Calmy-Rey, Micheline (2004, S)	
Département fédéral des finances (DFF)	Merz, Hans-Rudolf (2004, R)	

Source: `http://www.admin.ch/br/dokumentation/mitglieder/departementsvorsteher/archiv/index.html?lang=fr`

Table 5: Government departments and responsible ministers (2003-2007)

Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
roll call vote request by SP	1736	.08	.27	0	1
salience$_S$	1736	6.81	7.04	0	27
proposing minister$_S$	1736	.16	.37	0	1
proposing party group$_S$	1736	.02	.15	0	1
roll call vote request by SVP	1736	.04	.19	0	1
salience$_V$	1736	9.66	7.43	0	19.1
proposing minister$_V$	1736	.38	.48	0	1
proposing party group$_V$	1736	.01	.09	0	1
roll call vote request by CVP	1736	.01	.11	0	1
salience$_C$	1736	4.51	7.27	0	21.1
proposing minister$_C$	1736	.083	.28	0	1
proposing party group$_C$	1736	.00	.06	0	1
salience$_R$	1736	6.38	8.94	0	20.9
proposing minister$_R$	1736	.30	.46	0	1
proposing party group$_R$	1736	.01	.12	0	1
roll call vote request by FDP	1736	.00	.03	0	1
rcv request by non-specific parties	1736	.11	.32	0	1
procedural vote	1736	.04	.22	0	1

Table 6: Descriptive statistics

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