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Parliamentary Voting Procedures in Comparison

SIMON HUG, SIMONE WEGMANN and RETO WÜEST

Increasingly, scholars of legislative politics propose comparative analyses of parliamentary voting behaviour across different countries and parliaments. Yet parliamentary voting procedures differ dramatically across parliamentary chambers and ignoring these differences may, in the extreme, lead to meaningless comparisons. This paper presents a first glimpse at a comprehensive data collection effort covering more than 250 parliamentary chambers in 176 countries. Focusing on European legislatures it assesses what explains the differences in the rules among chambers. It is found that incentives linked to MPs' visibility contribute to explain the transparency of the adopted voting procedures.

Keywords: parliaments; voting procedures; transparency; electoral systems

In recent years studies on parliamentary voting have flourished in terms of both methodological innovations and geographical coverage. From the early work by Lowell (1901) and Rice (1925) on various aspects of voting cohesion scholars have developed sophisticated tools to deal with parliamentary voting data (for a survey, see for instance Poole 2005) and gone beyond the British and US parliaments to cover a wide range of legislative chambers (for some comparative work see Carey 2007a, 2009; Coman 2012; Depauw and Martin 2009; Hix and Noury 2007). At the same time in terms of both theoretical insights and methodological innovations, work on the US Congress has largely dominated the field. This domination in conjunction with a preconception that in Congress practically all business is conducted in roll call votes (see for instance Poole and Rosenthal 1997: 56 and below) has led to a considerable lack of attention to the exact voting procedures used in parliaments.

As these voting procedures vary considerably across parliamentary chambers (see for instance Carey 2009; Carrubba *et al.* 2008; Crisp and Driscoll 2012; Hug 2010; Inter-Parliamentary Union 1986; Saalfeld 1995), the datagenerating process that leads to roll call data inevitably varies. Nevertheless, scholars have relied on roll call data from different contexts without taking

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these differences into account (see for instance Carey 2007a; Coman 2012; Depauw and Martin 2009; Hix and Noury 2007). Except under rather optimistic assumptions, such comparative work is fraught with considerable problems.

One reason why scholars proceed this way might be linked to a scarcity of comprehensive information on parliamentary voting procedures. While the Inter-Parliamentary Union (1986) (see also Union Interparlementaire 1966), Saalfeld (1995), Carey (2009) and Crisp and Driscoll (2012) provided such information, it is either dated (first two sources) or offers only partial coverage (the latter three sources). Consequently, in this paper we wish to address two important questions, one descriptive and the other explanatory. First, how do voting procedures vary across parliaments in Europe (as of 2012)? And second, why is it that parliamentary chambers differ so markedly with regard to their procedures of voting? Answering these questions is central to comparative research on parliamentary voting, since different voting methods may have different consequences for the voting behaviour of members of parliament (MPs) and thus induce varying biases in our inferences.

To answer these questions we rely on a new comprehensive dataset, which aims at providing detailed and time-informative data on parliamentary voting procedures. The data collection relies on an expert survey carried out in the spring of 2012, with experts from an academic background, but also members of the Association of Secretaries General of Parliaments and other experts. Thus, drawing on this dataset allows us to answer the first question.

To address the second question we draw on the broader literature dealing with parliamentary rules and derive hypotheses that offer possible explanations for the choice of particular voting procedures. As the use of voting methods is typically laid down in the chambers' rules of procedures and since chambers can usually choose and modify their cameral rules (Martin 2011), the choice of parliamentary voting procedures depends on the incentives that MPs have in a political system. Therefore, in order to explain the collective choice of voting institutions in parliaments, we need to take account of the MPs' strategic incentives. We presume that explanations for the choice of voting procedures have to rely on MPs' re-election motives (Mayhew 1974). Evaluating the latter empirically, we find that some aspects linked to the re-election motive are related to characteristics of voting procedures in use in parliaments.

The remainder of the paper is structured as follows. The next section briefly presents the broader literature and motivates the importance of taking into account the data-generating processes of recorded votes when doing research that is based on parliamentary voting records. The third section offers a theoretical discussion of what might explain the occurrence of particular types of voting procedures in parliaments, and the following section is devoted to a short description of our data. Section five first describes how voting procedures vary across European parliaments as of 2012 and, second, proceeds to the empirical analysis explaining the choice of particular voting methods in parliamentary chambers. The final section concludes and sketches future research directions.

Parliamentary Voting Procedures and the Voting Behaviour of MPs

Recent work has alerted legislative scholars to the importance of institutional minutiae to understand parliamentary voting behaviour and outcomes (e.g. Binder 1997; Carrubba *et al.* 2006, 2008; Clinton and Lapinski 2008; Crisp and Driscoll 2012; Dion 1997; Hug 2010; Lynch and Madonna 2013; Roberts 2007; Schickler 2001; Sieberer *et al.* 2011; Stecker 2010; Thiem 2009). In a survey article, Cox (2006: 142) states that 'important bills can only pass pursuant to motions formally stated and voted upon in the plenary session' and that in the absence of constraining rules the legislative 'state of nature' would result in an impassable bottleneck. Parliaments have surmounted this problem to make themselves 'efficient' (Cox 1987) by resorting to the 'mirroring principle' (McCubbins 2005). Accordingly, the internal organisation of an institution tends to 'mirror' that institution's external environment (McCubbins 2005: 128). Hence, constraining rules adopted to confront the bottleneck in parliaments mirror the external checks and balances existing in the polity as a whole (McCubbins 2005: 123).

Central in these arguments are two elements. First, without voting² on the floor of a parliamentary chamber few if any things would be decided upon (see also Aydelotte 1977: 13; Saalfeld 1995: 529). Thus, motivated by the desire to enact legislation on important issues, members of busy parliaments are willing to regulate access to plenary time in order to overcome the plenary bottleneck problem. To do so, they create a set of rules that curb ordinary MPs' ability to delay bills and delegate agenda-setting authority to legislative (and sometimes executive) offices (Cox 2006: 146). Second, in most parliaments political parties play a central role in the allocation of offices endowed with agenda-setting powers and the plenary agenda is, therefore, typically controlled on a partisan basis (Cox 2006; Cox and McCubbins 1993). Yet the extent of such 'agenda cartelisation' depends crucially on the external political environment of a parliament. The more homogeneous the majority party (coalition) and its electorate is, the greater incentives backbenchers have to delegate to their party leaders control over the allocation of agenda-setting offices. This, in turn, increases the party leaders' power to stack these offices with members loyal to the party (McCubbins 2005).

These two elements combine, however, in an important way that is often neglected. Stacking agenda-setting offices with loyal party members requires that leaders have information about who the party loyalists are. Such information derives largely from legislators' voting behaviour. As a consequence, if party leaders have control over the allocation of valuable agenda-setting offices and are (at least partially) able to observe the voting behaviour of their members, backbenchers – even in fairly homogeneous parties – have incentives to vote according to the party line in order to build a reputation as party loyalists and thus enhance their chances of getting such offices. By contrast, if there is less agenda cartelisation, party leaders may have less control over resources that are central to MPs and the relative importance of other principals who

control valuable resources and are able to monitor individual voting behaviour (e.g. voters and interest groups) may increase. In such cases, MPs might have greater incentives to vote according to these latter principals' preferences and fewer incentives to toe the party line.

This is rendered more explicit by Carey (2009), who argues that MPs as agents are carrying out tasks for various - potentially competing - principals (e.g. party leaders, constituents, interest groups) and that in such principalagent relationships accountability plays a central role. Yet, since different types of voting methods make voting behaviour transparent to different principals, the extent to which an MP is accountable to a particular principal depends heavily on the voting procedure(s) used in a parliament. Following Saalfeld (1995), we distinguish three broad types of voting methods: (i) secret voting, (ii) signal voting and (iii) open voting (see also Crisp and Driscoll 2012; Inter-Parliamentary Union 1986). When a vote is secret, virtually no information about the voting behaviour of individual MPs is disclosed and thus it is not possible for principals to monitor their agents. Signal voting, by contrast, occurs in the presence of those attending the parliamentary sitting (e.g. party leaders). However, since individual voting positions are not recorded and published, the voting behaviour of MPs is not revealed to principals outside parliament (e.g. constituencies, interest groups). Finally, in an open vote the voting decisions of legislators are recorded and disclosed to the public (such as by publication in the official report or the minutes of proceedings of a parliamentary chamber) and therefore are visible to all of the MPs' principals.

As much of the theoretical and methodological innovation stems from research on the US Congress, and as for the latter it has commonly been assumed that practically all business is conducted by roll call votes (e.g. Poole and Rosenthal 1997: 56),³ the importance of voting methods has been considerably downplayed until recently. Thus, it is not surprising that the issue of partial observability of MPs' voting behaviour was first raised by comparativists, for instance by Fennell (1974), who tried to understand why some decisions in the Argentinian parliament were reached by roll call votes, while others were not. 4 Saalfeld (1995) provided a cursory glimpse at how voting rules differed across a set of western parliaments. Though broader in coverage, the compendia published by the Inter-Parliamentary Union (1986) (see also Union Interparlementaire 1966) also provided some cursory information on voting rules that was used by Carrubba et al. (2008) and Hug (2010) to alert scholars to the wide variety of voting methods in use. Similar, though more partial summaries appear in Carey's (2007b) work focusing mostly on Latin American parliaments (see also Carey 2009; Crisp and Driscoll 2012) and in Middlebrook's (2003a) study (see also Middlebrook 2003b), which covers mostly newly democratised Central and East European countries.⁵

Documenting such differences in voting procedures is obviously one thing, but several authors have empirically demonstrated that voting methods matter for the information that scholars typically extract from parliamentary voting records. The studies by Roberts (2007) and Hug (2010), for instance, provide

evidence that in the US House of Representatives and the Swiss lower chamber voting procedures affect the observed behaviour of MPs. While the former study exploits a rule change in the House to show how a change in voting procedures influences the composition of the voting record and thus the measures derived from it, the latter relies on a comparison between open votes and recorded but not published votes to demonstrate that relying on a (non-random) subset of votes leads to biased inferences about legislative behaviour.⁶

Consequently, scholars would be well advised to consider in more detail the data-generating processes of recorded votes when drawing inferences from parliamentary voting data. Doing so requires, on the one hand, appropriate data on voting procedures (which we make available for European parliaments in this article) and, on the other hand, models to assess the consequences of the specific data-generating processes (for a first theoretical attempt see Carrubba et al. 2008). Yet to assess these consequences, it is important to understand what explains the occurrence of different methods of voting in the first place. In the next section, we therefore discuss several hypotheses explaining why parliaments rely on different types of voting procedures for handling business on the floor.

Explaining Parliamentary Voting Procedures

Assessing the consequences of different voting methods requires an understanding of the reasons why parliaments adopt more or less transparent procedures of voting. In almost all parliaments the rules governing the use of voting methods are laid down in parliamentary standing orders that are chosen and can be modified by the parliaments themselves (Martin 2011). This implies that the parliamentary actors who exercise control over the rules of procedure are able to design them in a way that helps to advance their goals. Consequently, in order to fully understand the consequences of voting methods for MPs' voting behaviour, we need to know why they were chosen and what purposes they are intended to serve. Yet, although in most parliaments the choice of standing orders ultimately rests with MPs, this choice might depend not only on their personal preferences. As Kiewiet and McCubbins (1991) and Cox and McCubbins (1993) have argued, (majority) parties may act as 'procedural coalitions' and discipline party members who deviate from the party line in key decisions on the internal organisation of parliament. Therefore, the selection of voting procedures may hinge on the interests of both MPs and party leaders.

In this article, we assume that MPs are motivated by re-election incentives (Mayhew 1974), while party leaders seek to maintain party unity mainly in order to protect the reputation of their parties (Cox and McCubbins 1993; Kiewiet and McCubbins 1991) and implement their policy platforms. Party leaders are usually present when voting takes place on the parliamentary floor and they are thus able to monitor their members' voting behaviour independently of whether votes are cast by an open voting or a signal voting method

(with the possible exception of leaders in large chambers). Hence, since open votes do not provide them with an informational advantage, party leaders should, at least in small and medium-sized parliaments, be indifferent between open voting and signal voting.⁷ On the other hand, depending on the institutional setting, MPs may prefer the use of open votes over signal voting because the former allows them to cultivate a personal reputation. Variation in voting procedures across parliaments is therefore likely to be related to variation in MPs' preferences for voting transparency. Consequently, in the following we develop and evaluate a set of hypotheses explaining why MPs may have different preferences with regard to the adoption of more transparent voting methods.

The literature on this topic is, however, even scarcer than the one dealing with requests for roll call votes described in the previous section. Mezey (1993), in an exhaustive review chapter, discusses under the heading 'rules' various parliamentary norms and suggests that the interest in formal rules has been sparked recently (at the time of his writing) by rational choice scholars. In another review chapter Gamm and Huber (2002) offer the argument that the dominance of Congress in legislative studies has made research on rule changes rather less interesting, as its chambers have a fairly stable set of rules (though see Dion 1997). Similarly, Sieberer *et al.* (2011) discuss the scant literature on explanations of parliamentary procedures and note that only few studies have dealt with voting procedures, while Müller and Sieberer (2014) offer a more general overview of this literature.

Though the literature on parliamentary rules is rather scarce, based on either explicit formal models or rational choice institutionalist arguments, some explanations for particular rules or specific tendencies in how parliaments are organised have been proposed. Based on a formal model, Carrubba and Volden (2000) come to the conclusion that larger chambers will have more restrictive rules (see also the discussion by Taylor 2006: 328). Furthermore, Carroll et al. (2006) offer an explanation of what might explain the attribution of important offices in parliaments (what they label 'mega-seats') and Taylor (2006) provides a more general assessment of what explains the more or less centralised character of the procedures parliaments rely on. Also, drawing on rational choice institutionalism, Sieberer et al. (2011) argue that rule changes are either adopted because they offer advantages for at least a subset of actors (most likely parties controlling a majority in parliament) or because they promise efficiency gains. Similarly, one might draw on McCubbins' (2005) 'mirroring principle', implying that the way in which parliament is organised reflects the external checks and balances of the polity its members represent.

The studies discussed so far offer mostly insights on what might explain why a particular legislative chamber is more or less centralised in its organisation. While this is related to voting procedures (see our discussion below), more specific insights on how and why parliaments are more or less transparent are even rarer in the literature. Among the few exceptions, Carey (2009: 68f) offers a discussion of what might explain why actors would prefer to have

voting records public. While many of his arguments rely more on particular types of political actors – for instance, drawing on Snyder and Ting (2005), he argues that members of parliament who search for more support outside parliament are more in favour of transparent votes – he suggests that in situations where MPs are elected in single-member districts (SMDs) the desire to publicise one's voting record or that of an adversary makes the demand for open votes stronger.⁹

Carey's (2009) argument relies on the fact that in plurality elections candidates may directly appeal to the electorate. Yet whether they (or MPs in PR elections) may do so depends obviously on whether they have been selected for re-election. Similarly, Hix (2002) argues that since candidates for European Parliament elections are selected by national parties, the latter are important principals (see also Lindstädt *et al.* 2011). Candidate selection rules are therefore also likely to play a significant role in explaining why parliaments employ particular voting procedures.

Hence, for an MP to remain in parliament for an additional term requires at least two steps. First, the MP has to be reselected to appear on the electoral ballot. The importance of this step is eloquently described by Schattschneider (1942: 64), who argues that '[t]he nominating process thus has become the crucial process of the party. ... [H]e who can make the nominations is the owner of the party'. Consequently, MPs' incentives to publicise their voting decisions are strongly reduced in party-centred systems of candidate selection. This is due to the fact that the partisan principal is usually present when voting takes place on the parliamentary floor and, in most situations, is thus able to monitor MPs' voting behaviour as easily in signal votes as in open votes (however, this might not be true in the case of large parliaments). Therefore, since party leaders' ability to check whether their backbenchers toe the party line is similar in both types of votes, MPs cannot increase their probability of reselection by using open votes to show that their voting behaviour is aligned with their party leaders' preferences. On the other hand, if candidate selection is escaping partisan control - i.e. if actors other than party leaders decide whether or not to reselect an MP – open voting becomes more important. In such systems, MPs can rely on open votes to build favourable reputations with actors who have control over the candidate selection process, which may increase their chances of reselection. Our first hypothesis is therefore as follows:

Hypothesis 1. The more concentrated candidate selection is in the hands of national parties, the less likely it is that a transparent voting procedure will be chosen.

Second, having secured a place on the ballot, an MP (or potential future MP) must receive enough votes to win a seat in parliament. In this step the electoral system and the electoral principal come into place. If the electoral system encourages MPs to garner personal votes, then the electoral saliency of their voting records increases considerably. Consequently, as Carey (2009: 70ff)

points out, candidates in SMD elections have strong incentives to rely on open votes in order to provide voters with favourable information about their own voting behaviour and deliver 'bad news' about the records of their adversaries. Open voting loses its attraction, however, if MPs depend mostly on the electoral success of their party list and not on their individual performance. ¹⁰ Thus, our second hypothesis is stated as follows:

Hypothesis 2. If candidates are elected in SMD elections, it is more likely that a transparent voting procedure will be chosen.

Finally, drawing in part on Carrubba and Volden (2000) and Taylor (2006), we also expect that the size of parliament plays a role in the choice of rules. Carrubba and Volden (2000) develop a logrolling game in which legislators repeatedly vote over sets of distributive bills. Their model shows that as the size of parliament increases, cooperation (i.e. logrolling) becomes more difficult to maintain. Large parliaments, therefore, must have less inclusive voting rules (i.e. lower thresholds for passing a proposal) in order that vote trades can be sustained. Similarly, in a more general analysis explaining how exogenous institutions affect parliamentary procedures, Taylor (2006) finds that rank-and-file members have less procedural rights in large parliaments. He suggests, therefore, that MPs in large parliaments are willing to accept centralised procedures, because such arrangements 'prevent gridlock and cut the costs of forging cooperation' (Taylor 2006: 338).

Cox and McCubbins (1993) argue that MPs' probability of re-election depends not only on their individual voting records but, among other things, also on their parties' collective reputations or 'brand names', which provide informational shortcuts that help voters to solve their informational problems (see also Snyder and Ting 2002). MPs thus benefit from the brand names associated with their party labels, but occasionally they also have incentives to defect from the party line when doing so promises to be electorally advantageous. To solve this collective action problem, MPs delegate to their party leaders the authority to enforce cooperation and maintain the parties' brand names (e.g. Cox and McCubbins 1993; Kiewiet and McCubbins 1991). Yet party leaders' ability to enforce discipline hinges critically on whether they can monitor their members' voting behaviour. Carey (2009) thus argues that for a partisan principal open voting might become a necessity in large chambers, while in smaller chambers signal voting and open voting provide very similar information regarding members' voting decisions. Therefore, based on this argument, we assume that larger parliaments are more likely to have open voting instead of signal voting, since the latter becomes less transparent as the number of signals a party leader needs to observe increases. The third hypothesis hence is:

Hypothesis 3. The larger the number of MPs in a parliament, the more likely it is that a transparent voting procedure will be chosen.

In addition, the size of parliament should moderate the effect of partisan candidate selection. More specifically, the effect of party-centred systems of candidate selection on the likelihood of open voting should be reduced in small parliaments, since in such parliaments it is easier for party leaders to control their flocks in signal votes. Therefore, our fourth hypothesis is stated as follows:

Hypothesis 4. Small parliaments with party-centred candidate selection processes are less likely to have a transparent voting procedure than large parliaments with party-centred systems of candidate selection.

In the next section, we turn to a description of the data that we use to empirically evaluate our hypotheses.

Data

In this article, we provide new systematic data on voting procedures for 54 parliamentary chambers in 39 European countries. ¹¹ Table A1 (in the appendix) gives an overview of the countries and chambers that we consider. ¹² The data were collected in the context of a larger project on procedures in parliaments around the world. In order to obtain information on the institutional rules of parliamentary chambers, we carried out an online expert survey in the spring of 2012. While the survey was conducted mostly among experts with an academic background, we also surveyed members of the Association of Secretaries General of Parliaments (ASGP) and some other well-informed experts on parliaments such as members of local monitoring groups.

In total, 150 experts responded to the survey for at least one European parliamentary chamber. For all but 10 of these chambers at least two experts (the maximum is nine experts for the Italian lower house) offered information. The average number of responding experts is just above 3.1 per chamber. Since information on voting procedures is time-dependent, the experts were requested to indicate the current rules (as of 2012) as well as to document changes that occurred during the past 30 years.

After the survey was completed, we manually validated the reported information according to the following strategy. In a first step, we identified the variables for which two or more experts provided conflicting data. We then consulted the chambers' rules of procedure and constitutions to extract the correct information. If we were not able to find the information necessary to determine a correct answer, we replaced the experts' conflicting responses with a missing value and flagged the variable for further research.

In this article, we draw on these data to compare the voting procedures of European chambers with respect to the following three features. First, cameral rules typically define a standard operating procedure (SOP) for votes taken on the floor of a chamber. Following Crisp and Driscoll (2012: 92, n. 5), we define the SOP 'as the method of voting that will be used unless another

method is explicitly selected'. In some chambers, the SOP differs depending on whether voting is on a bill's final passage, the adoption of individual articles of a bill, amendments, budget motions or no-confidence motions. Thus, in this article we confine ourselves to assessing parliamentary chambers as to how they compare regarding their rules on final passage voting. Second, since some chambers allow for multiple methods of voting, we examine whether the SOP may be set aside in favour of alternative voting procedures. Finally, for the chambers in which alternative procedures of voting can be invoked, we analyse which actors are formally entitled to request alternative voting methods.

For the analysis of what might explain the adoption of more or less transparent voting procedures, we combine our data obtained from the expert survey with data from Teorell et al.'s (2013) 'Quality of Government' dataset and the sources contained therein. More specifically, we draw on Johnson and Wallack's (2006) information on electoral systems for measures of the size of electoral districts (to identify single-member district elections) and whether parties control the selection of candidates. 13 The size of parliamentary chambers comes from the same source. Following in part Taylor (2006), we will also use some control variables in our analysis. First, we consider whether a legislature can remove the executive (a measure coming from Regan et al. 2009 'Institutions and Elections Project') and second, we take into account whether a country has a bicameral parliament (this information is gleaned from Johnson and Wallack 2006). 14 As the last year covered by Johnson and Wallack's (2006) data is 2005, we also use the data for this year from all other sources. 15 Our measure of the dependent variable, however, describes the situation at the beginning of 2012. Proceeding in this way is justified by the fact that changes in parliamentary rules take time and in the European parliaments we cover the few changes that took place between 2005 and 2012. 16 Finally, as our main explanations for voting procedures rely on an electoral connection, we exclude from the analyses that evaluate these explanations all indirectly elected or unelected chambers.17

Empirical Analysis

Our data show considerable variation in voting procedures across European parliaments. Of the 54 parliamentary chambers covered in this article, 33 chambers use an open method of voting as their SOP for final passage votes, while 21 chambers rely on some form of signal voting. Table A2 (in the appendix) gives a detailed overview of the voting procedures used for final passage voting in European parliaments. Both types of voting procedures have further subtypes. According to Saalfeld (1995: 531–4), parliaments rely on the following voting methods to carry out signal voting: voting by assent, voice, show of hands, rising in places, ballot balls or tokens, ballot papers, division and the use of an electronic voting machine (EVM). Open voting, on the other hand, can be conducted by division, roll call, ballot papers and the use of an

TABLE 1
VOTING METHODS USED AS SOP FOR FINAL PASSAGE VOTING

	Type of votin	ng procedure
Precise voting method used as SOP	Signal voting	Open voting
Voting by assent	0	_
Voting by voice	1	_
Show of hands	8	1
Rising in places	5	_
Ballot balls or tokens	0	_
Ballot papers	0	0
Division	0	1
Electronic voting machine (EVM)	4	28
Roll call	_	3
NA	3	0
Total	21	33

Notes: For some chambers we have no or inconsistent responses with respect to the precise method of voting. These cases appear in the category *NA* in the table.

EVM. Table 1 shows how often, in our sample of European parliamentary chambers, each of these voting methods is used when voting is on the final passage of bills.

Among the 33 chambers that have an open method of voting as SOP for final passage votes, the EVM is the method used most frequently. Of the five chambers using some other method than the EVM, three conduct open voting by roll call. Voting by show of hands and division is each used by one chamber only. There is more variation among the chambers that use a signal voting method as their SOP. While eight chambers rely on voting by show of hands, five conduct signal voting by sitting and standing and four use an EVM. Finally, in one chamber votes are cast by voice (in our dataset information on the precise method of voting is lacking for the remaining three parliamentary chambers).

There are two notable differences among these methods of voting. First, voting methods vary with respect to how time-consuming they are. For instance, the method of voting by division used in the British House of Commons takes between 10 and 15 minutes to cast a vote and has thus been criticised as 'barbarous', 'uncomfortable and inconvenient' or 'unjustifiable' at various points in time (Wheare 1963: 21). The second difference pertains to the accuracy of voting outcomes. While some methods (such as voting by EVM) most of the time lead to very accurate voting results, others (e.g. voting by voice, show of hands and to a lesser degree voting by rising in places) are more error-prone (see also Saalfeld 1995). The inaccuracy of voting methods can be consequential, as the recent reform of voting procedures in the Swiss upper chamber exemplifies. In May 2013 the Swiss upper house decided to abolish its practice of voting by show of hands and replace it with electronic voting, although attempts to introduce an electronic voting device had repeatedly failed over the past 10 years. Several MPs changed their minds in favour

of electronic voting after votes were counted incorrectly on a number of occasions (which was widely reported in the Swiss media).

In some chambers the SOP for final passage voting may be set aside in favour of alternative methods of voting. This is important as it enables actors in parliament to strategically select procedures of voting (see for instance Crisp and Driscoll 2012; Hug 2010). Table 2 summarises for each type of voting methods how many chambers allow the SOP to be set aside and which alternative methods of voting can be invoked instead. Among the 21 chambers that use a signal method of voting as SOP for final passage voting, an open voting method may be selected in 10 chambers, while switching to secret voting is possible in five cases (for the remaining 10 chambers we received no or inconsistent information from our experts). Interestingly, only one of the chambers using signal voting as SOP does not allow actors to invoke a more transparent method of voting. Of the 33 chambers with an open standard operating procedure, 19 do not allow the SOP to be set aside in favour of another method. In five chambers secret voting can be invoked and only four chambers allow switching to a signal voting method (for six chambers we have no or inconsistent information).

The formal requirements for invoking alternative voting procedures differ across chambers in which a single voting method is not mandated. For our set of European parliamentary chambers, Table 3 provides an overview of the various actors that are entitled to request alternative methods of voting (a more detailed description is given in Table A2 in the appendix). In general, it is the individual MPs – either a single MP or a certain number or percentage of MPs – who are eligible to request some alternative voting procedure. There are, however, also some chambers that give their chairman or parliamentary parties discretion over how to vote. Only one chamber also allows the government and parliamentary committees to request an alternative method of voting.

If we compare our results with previous studies on voting procedures we arrive at some notable differences. While Saalfeld (1995: 541) notes for the

	SOP for final	passage votes
SOP may be set aside in favour of	Signal voting	Open voting
only secret voting	1	4
only signal voting	_	3
only open voting	6	_
secret voting and signal voting	_	1
secret voting and open voting	4	_
no other voting method	0	19
NA .	10	6
Total	21	33

TABLE 2
ALTERNATIVE VOTING METHODS FOR FINAL PASSAGE VOTES

Notes: For some chambers we have no or inconsistent responses with respect to the alternative methods of voting. These cases appear in the category NA in the table.

TABLE 3 ACTORS ENTITLED TO REQUEST ALTERNATIVE VOTING METHODS FOR FINAL PASSAGE VOTES

		SOP for final	l passage vote	
Actors entitled to request	Signal	voting	Open	voting
alternative voting method	Secret vote	Open vote	Secret vote	Open vote
Individual MPs	5	10	2	1
Parliamentary parties	1	3	2	0
Speaker of the chamber	3	4	0	3
Government/ministers	0	1	0	0
Parliamentary committees	0	1	0	0

Notes: This table only covers chambers in which the SOP may be set aside in favour of alternative methods of voting and for which we have the necessary data. The following countries (and chambers) are included: Austria (Nationalrat, Bundesrat), Bulgaria (Narodno Sabranie), France (Sénat), Germany (Bundestag), Greece (Vouli Ton Ellinon), Israel (Knesset), Italy (Camera dei Deputati, Senato della Repubblica), Lithuania (Seimas), Moldova (Parlamentul), Poland (Senat), Romania (Camera Deputatilor), Sweden (Riksdag), Turkey (Buyku Millet Meclisi) and the United Kingdom (House of Commons).

period between 1970 and 1994 that '[i]n some parliaments, such as the British House of Commons, the Danish Folketing, the Irish Dáil or the Swedish Riksdag, recorded votes are the standard way of voting', we find a much larger number (and share) of parliamentary chambers employing open voting as their SOP. This change is related to two reasons. First, our data covers a larger set of countries, and among those not considered by Saalfeld (1995: 536) we find many new democracies that have introduced electronic voting systems and make the voting record available to the public (Middlebrook 2003a, 2003b). Second, even among older democracies several chambers have recently adopted more open voting systems (for instance Switzerland, see Hug 2010).

We also find some marked differences if we consider the information on Latin American legislatures provided by Crisp and Driscoll (2012). While in European parliamentary chambers the frequent use of electronic voting machines has led to a situation where a large majority of parliaments carry out final passage votes by open voting, among the some 20 chambers analysed by Crisp and Driscoll (2012: 77), this is only the case in about half of them. In addition, Crisp and Driscoll (2012: 77) report that in most chambers where open voting is not the SOP a certain percentage of MPs may request open final passage votes. This is also the case in the European chambers, whose standing orders almost all allow an open vote to replace signal voting (if the latter is the SOP for final passage votes). However, in contrast to the Latin American parliamentary chambers, in some instances the European ones also give this power to parliamentary parties or chamber chairmen.

Having offered a detailed overview of voting procedures used in European parliaments, we now turn to an evaluation of our expectations about what might explain particular voting procedures. Our dependent variable takes the value of 1 if a parliamentary chamber uses open voting as SOP for final

passage votes and 0 if signal voting is used. We expect the electoral system (single-member districts or not), the selection process of candidates (the extent to which parties control the candidate selection process) and the size of parliament to affect whether voting procedures allow for more or less transparency. In addition, we control for whether the parliament can remove the executive and whether the parliament is bicameral.

In terms of coverage our analysis comes very close to Taylor's (2006) study, as there are only 19 non-European parliamentary chambers among the 55 chambers he considers. Yet with our 44 chambers that we can use in our analysis, our coverage is slightly broader than his. Table 4 reports the results of two simple logit models. The first model does not consider the moderating effect of the size of the parliament on the influence of party-centred candidate selection. The second model includes such an interaction between the size of parliament and party-centred candidate selection.

The results of our analysis only offer partial support to our proposed explanations of voting procedures used in final passage votes. While, as expected, as the control a party exercises over the ballot decreases (i.e. higher values on our independent variable), the more likely it is that a parliament adopts open voting as SOP in final passage votes. Consequently, the power the partisan principal has over its agents, i.e. possible MPs, affects significantly what procedures MPs use in final passage votes. Regarding the variables linked to the other principals, i.e. voters and the parliamentary party, we find weak and contradictory results. We argued that in SMD elections MPs have an incentive to publicise their votes and thus adopt open voting as SOP. Our

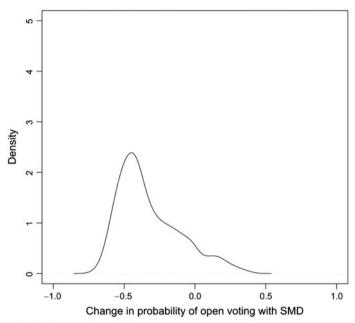
TABLE 4
EXPLAINING OPEN VOTING IN FINAL PASSAGE VOTES

	Model 1	Model 2
Average ballot under control of party	1.382*	1.356
	(0.754)	(1.039)
Size of the parliament	-0.005*	-0.005
	(0.002)	(0.004)
Size of the parliament × Average ballot under control of party		0.000
		(0.003)
Single-member district elections	-2.284	-2.303
	(1.852)	(1.914)
Legislature can remove executive	0.592	0.590
	(1.331)	(1.332)
Bicameralism	0.004	0.002
	(0.724)	(0.726)
(Intercept)	0.319	0.345
	(1.407)	(1.584)
N	44	44
AIC	61.141	63.140
BIC	71.857	75.629
$\log L$	-24.571	-24.570

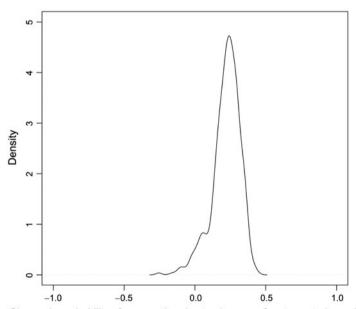
Note: Standard errors in parentheses.

^{*}indicates significance at p < 0.1.

FIGURE 1 AVERAGE PREDICTIVE DIFFERENCES



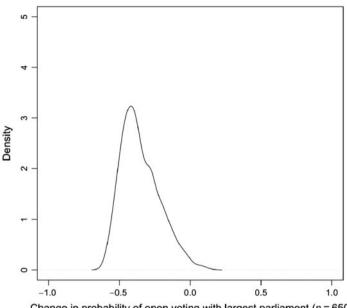
(a) Single-member districts



Change in probability of open voting due to absence of party control over ballot

(b) Average ballot under party control'





Change in probability of open voting with largest parliament (n = 650)

(c) Size of parliament

results suggest, however, that chambers elected in SMD elections are less likely to have open voting. This effect, however, fails to reach statistical significance. Similarly, larger parliaments, according to our results, are less likely to vote openly on final passage. When we also consider the mediating effect of the size of parliament in party-centred candidate selection, we find the expected positive effect. Due to the small number of cases and the considerable multicollinearity, however, this effect, as all others in this second model, fails to reach statistical significance. Regarding our two control variables, it appears that in systems in which the parliament can remove the executive, open voting is more frequently the SOP for final passage votes. This latter procedure is also more frequent in bicameral systems.

In Figure 1(a-c) we depict for the three main variables the average predictive differences (Gelman and Hill 2007; Hanmer and Kalkan 2013) based on Model 1 in Table 4. These are based on 1,000 draws from the distribution of estimated coefficients. For each we generated an average predicted probability of using open voting as SOP first based on the observed values of the independent variables. We then generated for each of the three main independent variables similar predicted probabilities, but replaced the values of the independent variable under consideration for all observations by the maximum value in the sample. The differences between the first average predicted probability and the

three others give information about how much the probability could change in the sample due to a maximum change in one of the independent variables.

Figure 1(a) first of all shows that the effect of a SMD electoral system is, contrary to our expectations, negative. If all elections were run in SMDs the probability of open voting as SOP would decrease on average by 0.31. As the figure suggests, however, there is considerable variation in this predicted change and in a sizeable share of the 1,000 draws the sign of this change is actually positive. Thus, we cannot be sure whether SMDs actually decrease the likelihood of open voting. Much clearer is the information depicted in Figure 1 for the two other variables (panels (b) and (c)). If we set the variable 'Average ballot under control of party' to its maximum (i.e. indicating the least party control) the probability of open voting increases on average by 0.22. The density of these probability changes is also clearly situated away from 0, indicating that we can be quite certain that control over the ballot is related to the presence of open voting (panel (b)). Finally, in Figure 1(c) underlines that the size of the parliament, contrary to our expectations, negatively affects the likelihood of open voting as SOP. If all parliaments were as large as the largest one in our sample (i.e. with 650 members), the probability of open voting would decrease on average by 0.35. Again, the density of these simulated changes in probabilities is clearly situated away from 0, suggesting that this relationship is quite robust.

Conclusion

The dominance of research on the US Congress and a rather flagrant misconception of the voting procedures in the two chambers of this parliament has led to a situation where the minutiae of how votes are carried out in parliamentary chambers is rather neglected. If we believe, however, that MPs are the agents of one or possibly several principals (e.g. Carey 2009; Hix 2002; Levitt 1996; Snyder and Ting 2005) we might well expect that different monitoring possibilities will affect MPs' voting behaviour. If this is the case then any analysis of voting data from a parliamentary chamber, and especially comparative work drawing on data generated in different contexts, is fraught with difficulties. More specifically, as the work by Roberts (2007) and Hug (2010) shows, depending on the monitoring possibilities the behaviour of MPs changes.²⁰ Consequently, we should be very wary of (especially comparative) work that fails to acknowledge the exact data-generating process, i.e. the voting procedures in place.²¹

One might excuse the neglect that voting procedures had to endure due to a lack of systematic information on methods of voting. While some compendia (see our discussion above) offered a glimpse at the variation existing in terms of voting methods across parliamentary chambers, no source provides comparable, systematic and time-sensitive data on this central element of parliamentary rules. In this article we have offered a first glimpse at a dataset in the process of being constructed on the basis of an expert survey. The data

on European parliamentary chambers showed considerable variation and also changes across time. Our first analysis suggests that voting rules are not chosen randomly but their selection follows some predictable patterns. Not surprisingly, following Carroll *et al.*'s (2006) argument, features of the elections play an important role. Needless to say, our analyses are only a first step in getting a better handle on explaining voting procedures in parliaments. Nevertheless, the variation in procedures and their link to electoral systems suggest that scholars working with parliamentary voting comparatively are well advised to take this variation in rules into account in their analyses.

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Notes

- We will use the terms 'voting procedures' and 'voting methods' as synonymous in this paper even though Rasch (1995: 489; 2000: 5) considers the former as consisting of 'a balloting method and ... of more or less complex decision rules'.
- Following Finer (1987: 631), voting is defined as the 'act of indicating one's preferences among competing policies or candidates.'
- Both Roberts (2007) and Clinton and Lapinski (2008) demonstrate that this assumption is quite wrong (see also Lynch and Madonna 2013).
- 4. Snyder and Ting (2005) offer a theoretical model motivating the use of roll call votes in the US Congress, while Stecker (2010) and Finke (forthcoming, 2015) provide empirical analyses on requests for roll call votes in German regional parliaments, respectively the European Parliament.
- 5. Many of these countries introduced electronic voting systems in their new parliaments, which explains the considerable focus of the studies on these voting methods. Additional aggregate information may be gleaned from the 2008 and 2010 'Global Survey of ICT in Parliaments' carried out by the Inter-Parliamentary Union and the United Nations (see http://www.ictparliament.org/globalsurvey).
- 6. In a related study Cantú et al. (2013) argue that different disclosure mechanisms do not generate different information on the Mexican lower house. More broadly, Carrubba et al. (2006) and Thiem (2009) on the European parliament and Clinton and Lapinski (2008) on the US Congress show that roll call votes relate to a quite specific and different subset of all decisions reached on the floor of the respective parliaments (for a study assessing what proposals reach the floor in Chile, see Londregan 2000).
- 7. One might even argue that party leaders generally prefer signal votes over open votes, as the former reduce the risk of revealing internal party conflict to principals outside parliament.
- Their analysis focuses mostly on explaining changes in parliamentary rules (in Austria, Germany and Switzerland) and remains at a rather abstract level, so far.
- Relatedly, he argues that electoral systems favouring personalised voting also strengthen the desire for transparent voting procedures. Stecker (2010) offers similar arguments in his empirical study on roll call vote requests in German regional parliaments.
- 10. Martin (2011) argues that for the type of committee structure chosen by parliaments the mechanism through which MPs try to garner personal votes is certainly an important mediating factor, but that when explaining voting procedures, if MPs mostly do constituency service they might equally wish to demonstrate their 'power' or their positions in open votes. See also the argument by Myerson (1993).
- 11. With the exception of Australia, Canada, New Zealand and the US, we include in our analysis all countries that are members of the United Nations (UN) 'Western European and Others Group' (WEOG) or 'Eastern European Group' (see http://www.un.org/depts/DGACM/Region

- alGroups.shtml, accessed 12 August 2014) and for which we have the data necessary to test our hypotheses. Information is missing for the following countries that are members of the WEOG or Eastern European Group: Albania, Andorra, Azerbaijan, Bosnia and Herzegovina, Lichtenstein, Malta, Monaco, Montenegro, San Marino and Ukraine. In addition, we also include Cyprus in our analysis (which is a member of the UN 'Asia-Pacific Group').
- 12. Regime type could affect the relationships presented in our hypotheses. Incentives for transparent voting procedures in non-democratic countries might be different from the incentives presented in the previous section. However, based on the democracy-dictatorship measure provided by Cheibub et al. (2010), only two countries (Belarus and Russia) in our sample were not classified as democracies. Therefore, we did the same logit models as presented in Table 4 excluding non-democratic countries. Results are robust and do not change substantially compared to the results presented in Table 4.
- 13. The variable measuring whether parties control the selection of candidates shows how much control parties exercise over candidates' access to a competitive position on the electoral ballot. More specifically, it is a weighted average of two variables: (i) the control parties have over single-member district ballots and (ii) the control they have over multi-member district ballots, where the weights are the shares of parliamentary seats elected from each tier. The initial variables take a value of 0 for parliaments where parties control both access to ballots and the order in which candidates fill the seats that the parties have won, a value of 1 for parliaments where parties control the former but not the latter, and a value of 2 for parliaments where there are few or no impediments to candidates' ability to appear on electoral ballots (Teorell et al. 2013: 227). Consequently, lower values indicate that candidate selection processes are more party-centred.
- 14. According to Strøm (2000: 262–6), parliament's ability to vote the executive out of office is the defining criterion that distinguishes what he refers to as 'parliamentary governments' from other systems of government. In parliamentary systems of government, party unity is often relatively high since MPs defecting from the party line are likely to face higher costs than their counterparts in other systems and open votes as a means to reveal deviant voting might therefore be less important. Consequently, parliamentarism may mediate the effects of partisan candidate selection and SMD elections. However, as in our sample there are only three countries that do not classify as parliamentary governments (Cyprus, Slovakia and Switzerland), there is not enough variation in our data to assess the mediating effects of parliamentary government (all three countries use multi-member district electoral systems to elect MPs and their parliaments take an intermediate position on the scale measuring party control over candidate selection).
- 15. For a few cases we updated the data as follows: for Iceland and Luxembourg the IPU's Parline database (http://www.ipu.org, accessed 2 March 2014) suggests that parliament can remove the executive, and we coded this variable accordingly; for Moldova the election report on the 2005 parliamentary elections (http://www.osce.org/odihr/elections/moldova/15251, accessed 2 March 2014) suggests that the parliament is unicameral and comprises 120 seats; for Turkey the IPU's Parline database (http://www.ipu.org, accessed 2 March 2014) suggests that the party lists are closed, and so we coded the variable average ballot under party control accordingly.
- Only Romania adapted its standing orders leading to a change to open voting between 2005 and 2012.
- 17. Thus we drop the Sovet Respubliki (Belarus), Senat (France), Bundesrat (Germany), Seanad Eireann (Ireland), Soviet Federatsii (Russia), Drzavni Svet (Slovenia) and House of Lords (United Kingdom). As Johnson and Wallack (2006) offer no (up-to-date) information on some chambers, we also had to drop the following cases from our analyses: Isle of Man (House of Keys), Macedonia (Sobranie), Montenegro (Skupstina), Poland (Senat) and Serbia (Narodna skupstina).
- 18. The comparison with Saalfeld's (1995) data is rendered difficult as the author only provides information on whether a particular voting procedure can be used, but not whether it is the SOP or to be used in particular circumstances.

- 19. We refrain from presenting a similar comparison with the data provided by Carey (2009), as it is less complete and not as up-to-date.
- Relatedly, a series of authors show that MP behaviour varies over the electoral cycle, which is very likely to be related to the pertinence of the monitoring of various principals (see for instance Carroll and Nalepa 2012; Levitt 1996; Lindstädt et al. 2011; Skjaeveland 1999; Traber et al. 2014).
- 21. As work by Londregan (2000), Clinton and Meirowitz (2004), Cox and McCubbins (2005) and Clinton (2012) among others shows, we should also consider the larger 'legislative game'.

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APPENDIX

TABLE A1

COUNTRIES AND PARLIAMENTARY CHAMBERS

Country	System	Chamber
Armenia	unicameral	Azgayin Zhoghov
Austria	bicameral	Nationalrat, Bundesrat
Belarus	bicameral	Palata Predstavitelei, Sovet Respubliki
Belgium	bicameral	Chambre des Représentants, Sénat
Bulgaria	unicameral	Narodno Sabranie
Croatia	unicameral	Hrvatski Sabor
Cyprus	unicameral	Vouli Antiprosopon
Czech Republic	bicameral	Poslanecka Snemovna
Denmark	unicameral	Foketinget
Estonia	unicameral	Riigikogu
Finland	unicameral	Eduskunta
France	bicameral	Assemblée Nationale, Sénat
Georgia	unicameral	Sakartvelos Parlamenti
Germany	bicameral	Bundestag, Bundesrat
Greece	unicameral	Vouli Ton Ellinon
Hungary	unicameral	Orszaggyules
Iceland	unicameral	Althingi
Ireland	bicameral	Dail Eireann, Seanad Eireann
Isle of Man	bicameral	House of Keys
Israel	unicameral	Knesset
Italy	bicameral	Camera dei Deputati, Senato della Repubblica
Latvia	unicameral	Saeima
Lithuania	unicameral	Seimas
Luxembourg	unicameral	Chambre des Députes
Macedonia	unicameral	Sobranie
Moldova	unicameral	Parlamentul
Netherlands	bicameral	Tweede Kamer der Staten-Generaal,
1 (Cureriana)	oreaniera:	Eerste Kamer der Staten-Generaal
Norway	unicameral	Stortinget
Poland	bicameral	Sejm, Senat
Portugal	unicameral	Assambleia da Republica
Romania	bicameral	Camera Deputatilor
Russia	bicameral	Gossoudarstvennaya Duma
Serbia	unicameral	Narodna Skupstina
Slovakia	unicameral	Narodna Rada
Slovenia	bicameral	Drzavni Zbor, Drzavni Svet
Spain	bicameral	Congreso de los Diputados, Senado
Sweden	unicameral	Riksdag
Switzerland	bicameral	Nationalrat, Ständerat
Turkey	unicameral	Buyku Millet Meclisi
Ukraine	unicameral	Verkhovna Rada
United Kingdom	bicameral	House of Commons, House of Lords
	Oicailleiai	Trouse of Commons, House of Lorus

TABLE A2
STANDARD OPERATING PROCEDURES (SOPS) FOR FINAL PASSAGE VOTES

		SOP (Precise	Possibility to invoke	Actors who can invoke	Possibility to invoke	Actors who can invoke	Possibility to invoke	Actors who can invoke
Country	Chamber	method)	secret voting	secret voting	signal voting	signal voting	open voting	open voting
Armenia	Azgayin Zhoghov	Open voting (EVM)	No	None	No	None	I	I
Austria	Nationalrat	Signal voting	Yes	20 MPs,	I	I	Yes	20 MPs
Austria	Bundesrat	(Kising in places) Signal voting (NA)	Yes	speaker 5 MPs, speaker	I	I	Yes	5 MPs, speaker
Belarus	Palata Predstavitelei	Open voting (EVM)	No	None	No	None	ı	. 1
Belarus	Sovet Respubliki	Signal voting (EVM)	NA	NA	ı	I	NA	NA
Belgium	Chambre des Représentants	Open voting (EVM)	No	None	No	None	ı	ı
Belgium	Sénat	Open voting (EVM)	No	None	No	None	ı	I
Bulgaria	Narodno Sabranie	Signal voting (EVM)	Yes	10% of MPs,	I	I	Yes	10% of MPs,
Croatia	Hrvatski Sabor	Open voting (EVM)	NA	NA	NA	NA	ſ	
Cyprus	Vouli Antiprosopon	Open voting (Roll Call)	NA	NA	NA	NA	ı	ı
Czech Republic	Poslanecka Snemovna	Open voting (EVM)	No	None	No	None	ı	I
Denmark	Folketinget	Open voting (EVM)	No	None	No	None	ı	ı
Estonia	Riigikogu	Open voting (EVM)	No	None	No	None	ı	ı
Finland	Eduskunta	Open voting (EVM)	NA	NA	NA	NA	ı	ı
France	Assemblée	Signal voting	NA	NA	I	ı	NA	NA

Table A2 (Continued)

				(
Country	Chamber	SOP (Precise method)	Possibility to invoke secret voting	Actors who can invoke secret voting	Possibility to invoke signal voting	Actors who can invoke signal voting	Possibility to invoke open voting	Actors who can invoke open voting
France	Nationale Sénat	(Show of hands) Signal voting (Show of hands)	No	None	I	-	Yes	30 MPs, 1 party,
								speaker, government, committees
Georgia	Sakartvelos Parlamenti	Open voting (EVM)	No	None	No	None	I	ı
Germany	Bundestag	Signal voting (Rising in places)	No	None	1		Yes	5% of MPs, 1 party
Germany	Bundesrat	Signal voting (Show of hands)	NA	NA	ı	I	NA	NA NA
Greece	Vouli Ton Ellinon	Signal voting (Show of hands)	No	None	ı	I	Yes	5% of MPs, speaker
Hungary	Orszaggyules	Open voting (EVM)	Yes	NA	No	None	ı	' 1
Iceland	Althingi	Open voting (EVM)	No	None	No	None	ı	I
Ireland	Dail Eireann	Open voting (EVM)	No	None	No	None	ı	ı
Ireland	Seanad Eireann	Open voting (EVM)	NA	NA	NA	NA	ı	I
Isle of Man	House of Keys	Open voting (EVM)	No	None	No	None	I	I
Israel	Knesset	Open voting (EVM)	No	None	Yes	Speaker	I	ı
Italy	Camera dei Deputati	Open voting (EVM)	Yes	30 MPs, parties (if they have 30 MPs)	No	None	ı	I

Italy	Senato della	Signal voting	Yes	20 MPs	I	I	No	None
Latvia	Saeima	Signal voting	NA	NA	ı	ı	NA	NA
Lithuania	Seimas	Open voting (EVM)	No	None	Yes	Speaker	I	I
Luxembourg	Chambre des Députes	Open voting (EVM)	No	None	No	None	I	I
Macedonia		Signal voting	NA	NA	I	I	NA	NA
Moldova	Parlamentul	Signal voting (Show of hands)	Yes	1 MP, speaker	I	I	Yes	1 MP, speaker
Netherlands		Open voting (Show of hands)	No	None	No	None	I	1
Netherlands	Eerste Kamer der Staten-Generaal	Open voting (Roll call)	No	None	No	None	I	ı
Norway	Stortinget	Open voting (EVM)	No	None	No	None	I	I
Poland	Sejm	Open voting (EVM)	No	None	No	None	ı	1
Poland	Senat	Open voting (EVM)	No	None	Yes	20 MPs speaker	ı	ı
Portugal	Assembleia da Republica	Signal voting (Rising in places)	NA	NA	ı	· ·	NA	NA
Romania	Camera Deputatilor	Open voting (Roll call)	Yes	MPs, 1 party	No	None	ſ	ſ
Russia	Gossoudarstvennaya Duma	Signal voting (EVM)	NA	, AN	ı	ı	NA	NA
Serbia	Narodna Skupstina	Open voting (EVM)	Yes	NA	Yes	NA	ı	ı
Slovakia	Narodna Rada	Open voting (EVM)	No	None	No	None	I	ı
Slovenia	Drzavni Zbor	Open voting (EVM)	No	None	No	None	I	I

Table A2 (Continued)

			Possibility to Actors who	Actors who	Possibility to Actors who	Actors who	Possibility	Actors who
Country	Chamber	SOP (Precise method)	invoke secret voting	can invoke secret voting	invoke signal voting	can invoke signal voting	to invoke open voting	can invoke open voting
Slovenia	Drzavni Svet	Open voting (FVM)	Yes	NA	No	None	ı	
Spain	Congreso de los Diputados	Signal voting (NA)	NA	NA	I	I	NA	NA
Spain	Senado	Signal voting (Rising in places)	NA	NA	I	I	NA	NA
Sweden	Riksdag	Signal voting (Rising in places)	No	None	I	I	Yes	1 MP
Switzerland	Nationalrat	Open voting (EVM)	No	None	No	None	I	ı
Switzerland	Ständerat	Signal voting (Show of hands)	NA	NA	I	I	NA	NA
Turkey	Buyuk Millet Meclisi	Signal voting (Show of hands)	No	None	I	I	Yes	20 MPs
Ukraine	Verkhovna Rada	Open voting (EVM)	NA	NA	NA	NA	ı	ı
United Kingdom	House of Commons	Signal voting (Voting by voice)	No	None	I	I	Yes	MPs
United Kingdom	United Kingdom House of Lords	Open voting (Division)	NA	NA	NA	NA	1	1