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## The influence of co-sponsorship on MPs' agenda-setting success

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#### **ABSTRACT**

This study investigates the influence of MPs' co-sponsorship activities on their agenda-setting success. It analyses the strategic choices open to MPs who engage in co-sponsorship, the resulting centralities in the co-sponsorship network, and the effects on the success of parliamentary proposals. MPs can develop their co-sponsorship efforts within their party family ('bonding') or beyond it ('bridging'), and they can use co-sponsorship both to receive political support ('support-seeking') and to provide it ('support-providing'). The success of these different co-sponsorship strategies is empirically assessed here by investigating the acceptance or refusal of parliamentary proposals introduced in the Swiss Parliament from 2003 to 2015. The bridging/support-seeking strategy that pro-actively recruits co-sponsors across party families is the most rewarding. This holds especially for MPs belonging to pole parties, who overall appear as more sensitive to centrality-related effects than MPs of moderate right parties.

**KEYWORDS** Parliament; agenda-setting; co-sponsorship; parties; Switzerland

By introducing and co-sponsoring parliamentary proposals asking the government and parliament to take legislative action, elected representatives (MPs) perform their agenda-setting function. Successful parliamentary proposals enable MPs to set the policy agenda and to initiate law-making processes. Parliamentary proposals must nevertheless be accepted by a majority of MPs. Identifying those factors that account for MPs' success in having their proposals accepted is thus important for understanding how policy issues get onto the political agenda.

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**b** Supplemental data for this article can be accessed online at: https://doi.org/10.1080/01402382. 2019.1697097

This study analyses MPs' centrality in the co-sponsorship network and the effects on the acceptance of MPs' parliamentary proposals. We conceive of MPs' centrality in the co-sponsorship network as *relational resources*. Relationships are crucial for an MP's capacity to mobilize advocacy resources such as technical policy expertise, information about constituency preferences, the support of interest groups, or political intelligence. Relationships also contribute to attracting political attention and garnering support for MPs' legislative proposals. The literature shows increasing interest in co-sponsorship networks: it aims to explain the emergence of these networks, and to understand their influence on MPs' ability to set the policy agenda and influence legislative outputs (Ringe *et al.* 2016).

The present analysis makes three contributions to that literature. First, most studies on legislative networks describe their structure in terms of density or modularity, and relate these structures to outcomes such as the level of responsiveness or productivity at the aggregate level of the entire parliament (e.g. Briatte 2016; Tam Cho and Fowler 2010). By contrast, we analyse how MPs' relational resources influence their agenda-setting success at the individual level (for similar attempts, see Craig 2015; Kirkland 2011).

Second, we develop and test a theory of the strategic choices MPs face when they engage in co-sponsorship activities. On the one hand, MPs can focus on other MPs within their own party family ('bonding' strategy), but they can also attempt to cut across party lines and reach out to MPs from other party families ('bridging' strategy) (Kirkland 2011). On the other hand, MPs must also decide how much effort to put into proactively trying to have their own parliamentary proposals co-signed by fellow MPs ('support-seeking' strategy), and/or reactively co-sponsoring proposals introduced by their peers ('support-providing' strategy). The present study innovates by considering the 'support-seeking' and 'support-providing' dimensions in addition to the 'bonding–bridging' dimension.

Third, we study legislative networks outside the US, namely in Switzerland. Whereas the literature on co-sponsorship is well developed in the US both for Congress (e.g. Fowler 2006a, 2006b; Kessler and Krehbiel 1996; Koger 2003) and state legislatures (e.g. Bratton and Stella 2011; Kirkland 2011), studies in other contexts are still scarce (for exceptions, see Aleman and Calvo 2013; Briatte 2016; Costello 2011; Ringe et al. 2013). The Swiss parliament offers fertile ground for the analysis of co-sponsorship, since from a comparative perspective it is an intermediary case between weak and strong parliaments (Vatter 2016). Moreover, Swiss MPs are granted powerful agenda-setting instruments, and are fairly unconstrained by party discipline. Finally, in Switzerland's fragmented multiparty system, MPs must establish cross-party connections to receive majority support for their legislative proposals.

In line with previous studies (e.g. Kirkland 2011), our results show that the bridging strategy is more rewarding than the bonding strategy when it comes to agenda-setting success. Developing ties beyond one's party family results in cooperation that is not redundant, and allows MPs to extend support beyond their normal sphere of influence. Yet, unlike the implicit assumption of Kirkland's (2011) study, our findings also indicate that, when following a bridging strategy, pro-actively seeking co-sponsors (support-seeking strategy) is more beneficial than reactively co-signing the proposals of MPs from other parties (support-providing strategy). Moreover, we find that the agenda-setting success of MPs belonging to pole parties is particularly sensitive to their centrality in the co-sponsorship network.

In the next section, we discuss the importance of relational resources and develop our theoretical argument on the strategic choices MPs face when they engage in co-sponsorship activities. Following on, we describe our data-set, which covers all parliamentary proposals introduced in the Lower Chamber of the Swiss parliament from 2003 to 2015. In the empirical section, we start with descriptive results on MPs' centrality in the cosponsorship network, and then turn to the analysis of how centrality influences agenda-setting success. In conclusion, we summarise our main findings and highlight their broader implications.

## Theoretical framework

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## Centrality in the co-sponsorship network as a relational resource

Social networks among individuals or organisations play a crucial role in politics (Berardo and Scholz 2010; Fischer and Sciarini 2016; Ingold and Leifeld 2014; Victor et al. 2017). As any type of social actor, MPs do not act in isolation. Their behaviour and success depend on their interactions with peers (Ringe et al. 2013: 602). Collaboration enables MPs to access novel information, to learn about alternative perspectives, to build and connect different advocacy coalitions, and to secure support for their policy proposals. Legislative networks are especially important in countries with a multiparty system and coalition governments, where no single party is able to adopt policies on its own.

An increasing body of research, mostly dealing with the US Congress, focuses on 'the micro-foundations' of legislative decision-making (Fowler 2006a, 2006b; Kirkland 2011; Kirkland and Gross 2014; Tam Cho and Fowler 2010). Networks among MPs are shown to be important for understanding parliamentary outputs at both aggregate (i.e. Chamber) and individual (i.e. MPs) levels (Ringe et al. 2016). However, analysing these legislative networks is not without challenges. Many interactions between MPs, such as sharing workplaces or meeting outside parliament,

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are difficult to observe. Moreover, these (informal) relations are based on a complex combination of partisan, ideological, institutional, geographic, demographic, and personal affiliations (Fowler 2006a: 457).

One form of social relation among MPs visible to the public and relatively simple to assess for researchers is the co-sponsorship of parliamentary proposals (Ringe et al. 2016). Co-sponsoring parliamentary proposals signals support between MPs and may result from similar policy preferences or strategic considerations (Fischer et al. 2019). Co-sponsorship hints at a joint effort by multiple MPs, who may represent a variety of ideological positions (Craig 2015). Co-sponsorship is also a vehicle for one or several MPs to express support for others (Fowler 2006a). Unlike earlier work claiming that legislative co-sponsorship is not very informative (Kessler and Krehbiel 1996), 'scholars and politicians alike appear to agree that co-sponsorship is a social act that is meaningful and significant' (Tam Cho and Fowler 2010: 125). In agreement with this assessment, we argue that the relational resources of MPs stemming from their cosponsorship activities help to explain their agenda-setting success. The crucial question is then which co-sponsorship strategy is the most rewarding.

## Choosing co-sponsorship strategies

In line with Fenno's (1973) typology, we understand MPs as strategic actors who pursue three different goals: good public policy through agenda-setting and amendment activities ('policy-seeking'); increased chances of re-election by sending signals to voters and attempting to secure electoral gains ('vote-seeking'); increased institutional prestige and influence through advancement in the Chamber ('office-seeking'). MPs can use parliamentary proposals and co-sponsorship activities to advance all three goals. This article focuses on the influence of co-sponsorship activities on agenda-setting success.

As they develop their co-sponsorship strategies, MPs are constrained by their limited information-processing capacities. Political attention is a scarce resource and issues are constantly competing to attract policy-makers' attention (Jones and Baumgartner 2005). A given MP has a number of parliamentary proposals they may wish to introduce to get co-sponsored, but in parallel there are countless - concurrent - proposals that their peers also want to put on the policy agenda. MPs must thus set priorities and make two choices about their co-sponsorship strategy.

First, MPs must decide how much effort to invest into developing ties with MPs from their own party family or establishing ties across party family lines. The distinction between 'bonding' and 'bridging' ties in political networks (e.g. Berardo 2014; Berardo and Scholz 2010) resonates with Granovetter's (1973) well-known argument about strong versus weak ties. Bonding and bridging strategies differ in the underlying logic that influences why they become established, as well as in the signals MPs send to their peers. Bonding strategies strengthen relations with other MPs to whom an individual MP is already linked. They help to reciprocate and intensify existing relationships, and thus to maximise credibility and decrease the risk of defection by proximate allies. In contrast, bridging strategies connect an MP to others who are further away. They allow an MP to reach out to others who are less similar, to access new information and to receive support from a broader network (e.g. Berardo 2014; Berardo and Scholz 2010).

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Arguing along similar lines, Kirkland (2011) applies Granovetter's (1973) concepts to the analysis of co-sponsorship networks, arguing that 'weak ties' between legislators (which we label 'bridging ties') increase the probability of legislative success, whereas 'strong ties' (which we label 'bonding ties') do not.<sup>2</sup> Strong ties allow MPs to gain visibility and popularity in their party family, but they also lead to closure and may therefore come at the price of reduced outside support. By contrast, weak ties help MPs to access relevant information (e.g. about the salience or technical characteristics of the issue at stake, as well as about policy feasibility and acceptability) they could not access with a bonding strategy. On this view, a bridging (or 'weak ties') strategy is crucial for legislative success, since it represents cooperation that is non-redundant and enables MPs to expand their sphere of influence beyond those who share their ideological preferences, and are already predisposed to support their parliamentary proposals (Kirkland 2011).

The argument on the achievement of bridging ties was developed in the US bi-partisan context, but is even more relevant for multiparty systems where parties need to form coalitions to gain majority support in parliament. This holds both in parliamentary systems with governing coalitions, especially in case of minority government, and even more so in mixed systems such as the Swiss one with no strict majority-opposition rationale and a varying line-up of coalitions. Accordingly, our first hypothesis states that developing bridging ties has a stronger (positive) effect on the likelihood of success of parliamentary proposals than developing bonding ties.

Second, MPs must decide how much to invest in 'support-seeking' and 'support-providing' strategies. A support-seeking strategy means that MPs intensively attempt to recruit co-sponsors for their own parliamentary proposals, i.e. that they proactively contact their peers and ask them for cosignatures. By contrast, a support-providing strategy means that MPs adopt a reactive attitude, i.e. they merely welcome their fellows' demands for cosignatures or signal to others that they are available for co-signatures.

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This second dimension of co-sponsorship strategy speaks to Fowler's (2006a) distinction between active and passive MPs. An active MP invests time and energy in consulting peers on draft legislative proposals and mobilizing co-sponsors (e.g. through sending 'Dear Colleagues' letters to peers in the US House; Craig 2015), whereas a reactive MP merely cosigns proposals without attempting to influence their content or convince other MPs to join the co-sponsorship network.

Surprisingly enough, previous studies assessing the influence of legislative co-sponsorship on agenda-setting success have largely ignored the distinction between support-seeking and support-providing strategies. For instance, Kirkland (2011) only focuses on the support-providing strategy, as measured by MPs' out-degree centrality in the co-sponsorship network. He finds that MPs who follow a bridging/support-providing strategy (i.e. who engage in co-signing activities cutting across party lines) are more successful than those who rely on a bonding/support-providing strategy (i.e. who repeatedly co-sign proposals introduced by their party fellows). However, he does not justify (or discuss) the focus on outgoing ties and the omission of incoming ties.

While we share Kirkland's (2011) view about the superiority of the bridging over the bonding strategy (see our first hypothesis), we wonder about the superiority of the support-providing over the support-seeking strategy. True, repeatedly co-signing proposals introduced by MPs of other parties will help MPs to develop a reputation of altruism. The bridging/support-providing strategy may then favour reciprocation and log-rolling (Berardo and Scholz 2010), i.e. it may increase the likelihood of support of proposals introduced by altruist MPs. However, this strategy may have negative side effects. Altruist MPs may convey a negative image of being a follower or even a betrayer if they frequently co-sponsor proposals introduced by MPs from other party camps. In that scenario, a bridging/support-providing strategy may even become counterproductive, i.e. it is likely to weaken the agenda-setting success of MPs relying on such a strategy.

MPs pursuing a bridging/support-seeking strategy display a different attitude towards the arguments and information advanced by their fellow MPs. MPs seeking majorities for their own proposals according to a bridging strategy must care about the opinions of ideologically distant peers. By regularly going beyond their own party family to seek support, MPs are more likely to be actively exposed to contrasting opinions and arguments. This may help them to learn how to better anticipate objections, accommodate heterogeneous viewpoints, and tailor proposals catering to a broader range of MPs. While a support-providing strategy also allows MPs to acquire information and gain recognition from their peers,

it does not develop MPs' capacity to defend their causes in front of other MPs with diverging political preferences - or at least not to the same extent as in a support-seeking strategy. Moreover, proactively looking for co-sponsors beyond party family lines is more likely to increase MPs' visibility and strengthen their reputation and credibility as 'policy entrepreneurs' (Kingdon 1995). Their prominence in the co-sponsorship network may then 'spill over' and enhance the likelihood of acceptance of their parliamentary proposals.

From this we derive our second hypothesis that a bridging/supportseeking strategy has a stronger (positive) effect on the likelihood of success of parliamentary proposals than a bridging/support-providing strategy.

## The Swiss parliament

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The Swiss parliament is a promising field for the study of legislative cosponsorship for three reasons. First, in comparative perspective, the Swiss parliament combines institutional strength and structural weakness and is, therefore, an intermediary case between a strong parliament of the German or Scandinavian type and a weak parliament typical of a majoritarian democracy (e.g. the UK, France, or Ireland) (Lijphart 1999; Vatter 2016). Institutionally, the Swiss government system tends towards a separation of powers (Schwarz et al. 2011; Shugart and Carey 1992), which grants MPs powerful agenda-setting and law-making instruments (Siaroff 2003; Vatter 2016). Therefore, the Swiss parliament, like the European Parliament, is capable of actually creating legislation, 'a classical parliamentary function almost forgotten by some national parliaments' (Corbett et al. 2007: 7). Yet the Swiss 'militia' parliament lacks resources and is structurally weak (Schnapp and Harfst 2005; Vatter 2016; Z'ggragen and Linder 2004). MPs' involvement is part-time and incidental to a principal professional activity. As a result, plenary sessions take place only four times a year, for three weeks.

Second, Swiss MPs are less constrained than their counterparts in traditional parliamentary systems. Their freedom of vote is guaranteed by the Swiss constitution (art. 161.1) and they do not have to align to the party line.<sup>3</sup> Moreover, there are no legal limitations on the number or scope of parliamentary proposals and questions an MP can introduce. The only limitation stems from the fact that individual MPs can introduce parliamentary interventions during plenary session times. In the agenda-setting phase, they can rely on parliamentary initiatives, motions and postulates to initiate legislation (see also next section). Empirically, the legislature gives the impetus to about 30% of legislative processes, whereas the executive initiates about half of the processes - the remainder stem from the people (through popular initiatives) or the international arena (Jaquet

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et al. 2019; Sciarini et al. 2002). While MPs submit parliamentary initiatives, motions and postulates in their name, they often look for co-sponsors to demonstrate broad support and increase chances of later acceptance (Fischer et al. 2019). Therefore, co-sponsorship is definitely more than 'cheap talk'. In comparative perspective, Switzerland displays a relatively high share of parliamentary proposals co-sponsored by other legislators (Briatte 2016).4

Third, Switzerland has a fragmented multiparty system, and parties must form coalitions to gain majority support in parliament. In such a context, cutting across party lines helps to increase the likelihood of success of parliamentary proposals. For our present purposes, we simplify the party system into three party families: the Left (Socialists and Greens), the moderate right (Christian Democrats, Radical Liberals, Conservative Democrats and Green Liberals), and the conservative right (Swiss People's Party and small regional, far right populist parties). In parliament, this threefold partition typically results in either centre-right coalitions (i.e. coalitions between moderate and conservative right parties against leftwing parties) or centre-left coalitions (i.e. moderate right and left-wing parties allying against the conservative right) (Fischer and Traber 2015; Schwarz and Linder 2006; Sciarini 2014; Sciarini et al. 2015). Given their pivotal position, the parties of the moderate right (and more especially the two governing parties, the Radical Liberals and the Christian Democrats) often belong to the winning coalition in the National Council (Schwarz and Linder 2006).

#### Data

Our dataset covers all parliamentary proposals (N = 6092) introduced in the National Council, the Lower Chamber of the Swiss parliament, between the winter session 2003 and the autumn session 2015, i.e. during the 47th, 48th, and 49th legislatures.<sup>5</sup> As already mentioned, parliamentary proposals take the form of 'initiatives', 'motions', or 'postulates'. These three types of instrument are not equally powerful, and nor are they equally easy to activate. Provided both Chambers endorse it, a parliamentary motion asks the federal government to take legislative action. The parliamentary initiative is even more powerful, since it allows the parliament to submit a bill and to control the decision-making process from start to finish, thus by-passing the executive. The treatment of such a parliamentary initiative involves two stages. When a proposal is introduced, it must first be supported by the corresponding parliamentary committee,6 and then by the parliamentary committee of the other Chamber. Finally, a parliamentary postulate is easier to use than a parliamentary motion or initiative, since only the Chamber to which its author

belongs must support it. However, it is less constraining for the executive. It requires the government to deliver a report on a given issue, but it is then up to the government to decide whether that should lead to legislative change.

The acceptance of a parliamentary proposal in the National Council represents an agenda-setting success for those MPs who authored it. This is the dependent variable in our analysis. It is assessed as a dichotomous variable measuring whether MPs' proposals were accepted or not at the first vote, either in a committee (for parliamentary initiatives) or in a plenary session (for motions and postulates).8 Proposals are coded as rejected if they were refused by a parliamentary majority, withdrawn by their author, or classified for different reasons.9 In our dataset, the National Council adopted 1653 of the 6092 parliamentary proposals (27%).

The success rate varies strongly across party families. In line with the pivotal character of moderate right parties, proposals emanating from those parties are far more successful than those introduced by MPs of the Left or conservative right parties. The rate of success is 39% for the moderate right (N=2178), 18% for the Left (N=2571) and 25%, for the conservative right (N = 1343). Further, the success rate also varies across types of parliamentary proposals. It is higher for parliamentary initiatives (35%, N = 864) and postulates (38%, N = 1620) than for motions (21%, N = 864)N = 3608). Finally, the success rate shows a slight increase over time: 25% for parliamentary proposals introduced in the 47th legislature (N = 1617), 27% for the 48th legislature (N = 2366), and 29% for the 49th (N = 2109).



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Consistent with the theoretical discussion above, we rely on co-signatures to measure MPs' centrality in the co-sponsorship network. In each network, a directed tie from MP A to MP B is coded for each parliamentary proposal of MP B that is co-sponsored by MP A.10 This results in a directed valued network between all MPs, where ties represent the number of proposals that one MP has had co-sponsored by the other MP during a given period. We dichotomise the co-sponsorship network based on a 0 threshold. That is, as soon as MP A has co-signed at least one proposal of MP B, the network tie takes the value 1; it takes the value 0 otherwise. 11 To assess MP B's supportseeking, we rely on in-degree centrality (Freeman 1979), calculated as the percentage of other MPs who co-sponsor at least one proposal of MP B.<sup>12</sup> Out-degree centrality is calculated following the same logic as the in-degree centrality, except that it is based on co-signatures that an MP offers to their peers, rather than on co-signatures that an MP receives from their peers. Substantively, out-degree centrality measures the extent to which MPs engage in a support-providing strategy consisting in actively co-signing proposals introduced by their peers. Finally, for each MP we calculate both inand out-degree centralities based on ties to/from MPs from the same party family (bonding) and to/from MPs from a different party family (bridging).

Thus, for each MP and for each period of time, we calculate four measures of centrality: in- and out-degree centrality to operationalise support-seeking and support-providing strategies, respectively, and both types of centrality in the network of ties within the same party family (bonding) and in the network of ties across party families (bridging). We calculate these four centralities for 12 time periods. That is, for each of the three legislative periods we calculate the scores of, for example, bonding/support-seeking centrality in the first year, in the first two years, in the first three years, and in the four years of a given legislative period. We integrate the 12 resulting scores of bonding/support-seeking centrality (four years times three legislatures) into a single variable. We do the same for the other three centrality measures, and are thus left with four variables covering the 12 years under study.

#### Model and controls

Our data has a hierarchical structure, since each parliamentary proposal (level 1) is nested in MPs (level 2). Given the binary nature of the dependent variable (acceptance or rejection), we estimate two-level logistic models with random effects on the MP level. Further to the centrality measures, the models include several variables controlling for confounding factors.

On the individual level, besides MPs' gender, the first control variable is MPs' party family that, as already mentioned, takes three forms: the Left, the moderate right, and the conservative right. Second, based on the electoral district (canton) in which MPs were elected, we create a variable distinguishing between five regions (West, North-west, East, Centre, and South). This also takes into consideration Switzerland's linguistic diversity, with the Centre, Eastern, and North-western regions corresponding to German-speaking cantons, the Western region to French-speaking cantons, and the Southern region to the Italian-speaking canton.

On the level of proposals, the first control variable is the type of parliamentary proposal at stake (initiatives, motions, or postulates). The second is the number of co-sponsors of a given parliamentary proposal. This control is crucial. Including it makes sure that our model estimates the effect of legislator-specific traits, and in particular their centrality in the co-sponsorship networks, while controlling for proposal-specific popularity (for a similar argument, see Kirkland 2011). Among the 6092 parliamentary proposals included in our study, the number of co-signatures ranges from 0 to 169, and the mean amounts to 20.7. Yet the distribution is highly skewed towards small numbers of co-signatures: 672 proposals

(11%) have 0 co-signatures; the median number of co-signatures is 17. Therefore, we use a log transformation of the number of co-signatures.<sup>14</sup>

Third, we control for both MPs' age and seniority at the time of submitting the parliamentary proposal. Age is calculated in years and seniority is calculated as the number of days (in hundreds) a given MP spent in parliament between the beginning of their first mandate and the date of introduction of the parliamentary proposal at stake, taking into account possible career breaks (Turner-Zwinkels et al. 2019). Fourth, three dummy variables capture the leadership positions of MPs: one for MPs holding the national party's presidency, one for MPs heading the parliamentary group, and one for MPs holding the presidency of one of the 11 parliamentary committees of the National Council. MPs with leadership positions have a higher status and visibility, and may thus have better chances to successfully introduce parliamentary proposals.

Fifth, we include a variable counting the total number of parliamentary proposals each MP introduced during the legislature. Sixth, both the development of co-sponsorship ties across party camps and the adoption of proposals are less likely in highly conflictual policy areas than in areas where MPs' preferences do not strongly diverge. To control for ideological differences between parties, we calculate the average convergence/ conflict level by means of the Hix agreement index (Hix et al. 2005) in final votes on bills, by legislative period and issue area. Eight issue areas were retained corresponding to the seven Federal Departments (Ministries), plus an additional category of proposals remaining under the responsibility of parliament or the Federal Chancellery. Finally, we control for the timing of introduction of parliamentary proposals. More specifically, we include two sets of dummies accounting for possible variations between legislative periods and between parliamentary years within a legislative period, respectively.

## **Empirical analysis**

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Our analysis falls into two parts. We first present some descriptive statistics and second turn to the analysis of whether and to what extent relational resources associated with centrality in the co-sponsorship networks account for MPs' agenda-setting success.

## Centralities for the two by two combinations of co-sponsorship strategies

For the support-seeking strategy and the three legislative periods under study, MPs' bonding centrality amounts to 49% on average (Table 1). The

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Table 1. Average in- and out-degree centrality scores per party family.

		7		Bonding				Bridging	
		Total	Left	Moderate right	Conservative	Total	Left	Moderate right	Conservative right
Support-seeking	Mean	0.49	0.58	0.36	0.59	0.14	0.11	0.18	0.12
(in-degree)	Standard deviation	0.23	0.20	0.17	0.25	0.12	0.09	0.14	0.10
	(V)	(364)	(123)	(149)	(92)	(364)	(123)	(149)	(65)
Support-providing	Mean	0.43	0.51	0.31	0.51	0.12	0.10	0.14	0.12
(out-degree)	Standard deviations	0.14	0.12	0.08	0.11	0.05	0.04	90.0	0.04
	(N)	(364)	(123)	(149)	(93)	(364)	(123)	(149)	(95)
Note: The total number of MPs in excluded from Table 1.	cluded i	dataset amoi	unts to 370. H	However, six MPs	n our dataset amounts to 370. However, six MPs changed their party affiliation between (or during) legislatures and are thu	y affiliation	between (or	during) legislatur	es and are thus

corresponding figure is slightly lower for the support-providing strategy (43%). This means that 'standard' MPs' proposals get co-sponsored by half of MPs belonging to the same party family, and that a 'standard' MP co-signs proposals introduced by a bit less than half of their fellow MPs. For both the support-seeking and support-providing strategies, the average score of bridging centrality is - not surprisingly - far lower. Yet co-sponsorship activities also take place across party family lines. The average centrality score amounts to 14% for the support-seeking strategy, and 12% for the support-providing strategy; very few MPs (fewer than 5%) have never been co-sponsored by one or more MPs not belonging to their party family, and all MPs co-signed at least one parliamentary proposal introduced by an MP from another party family.

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As Table 1 shows, average values for the whole population of MPs hide some strong differences between party families. Starting with the bonding strategy (Table 1, left-hand side), MPs from both left-wing and conservative right parties display high levels of centrality. This means that they attract many co-signatures by peers from their party family, and they also frequently co-sign their peers' proposals: centrality scores amount to more than 50%, on average. Bonding centrality is far lower among MPs of moderate right parties (less than 40% for both support-seeking and support-providing strategies). Further, for all three party families Table 1 shows that internal dispersion, as measured by standard deviation, is about twice as high for the in-degree than for the out-degree centrality. This suggests that in each party family MPs differ more from each other with respect to their support-seeking than to their support-providing strategies. Thus, in each party family, MPs are rather similar when it comes to co-signing proposals, but they do not attempt or manage to attract co-signatures to the same extent.

Bridging centralities (Table 1, right-hand side) are unsurprisingly far lower than bonding centralities. Even in the Swiss 'consensus democracy' (Lijphart 1999), MPs of the same party family remain the most straightforward partners. Moreover, unlike the case of the bonding strategy, bridging centrality is higher among moderate right MPs than among MPs of the Left or the conservative right. Moderate right MPs more frequently receive co-signatures from peers not belonging to their party family (18%) than MPs of the Left or the conservative right (11-12%). A similar pattern holds for the support-providing strategy.

A closer look at the data shows that among the first percentile of MPs with the highest scores of bridging/support-seeking centrality, there is an overwhelming majority (60%) of moderate right MPs, but only 23% of conservative right and 17% of left-wing MPs. The distribution is even more imbalanced with respect to bridging/support-providing centrality.

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Among the first percentile of MPs with the highest centrality scores, there are 81% of moderate right MPs, but only 13% of conservative right and 6% of left-wing MPs. The higher bridging centrality of moderate right MPs is arguably due to their intermediate location on the left-right spectrum. As a result of this, and of the related not too extreme character of their parliamentary proposals, moderate right MPs are both more likely to co-sign proposals introduced by MPs from another party family, and more prone to get their proposals co-signed by MPs from another party family.

This notwithstanding, standard deviations associated with bridging centralities again reveal that in all three party families there is a great deal of variation across MPs. Moreover, and as was already the case for bonding centralities, dispersion is higher for the support-seeking strategy than for the support-providing strategy. 15 In light of the strong variations in network centralities between MPs, it is worth delving deeper into the effects of co-sponsorship strategies on agenda-setting success.

## Explaining MPs' agenda-setting success

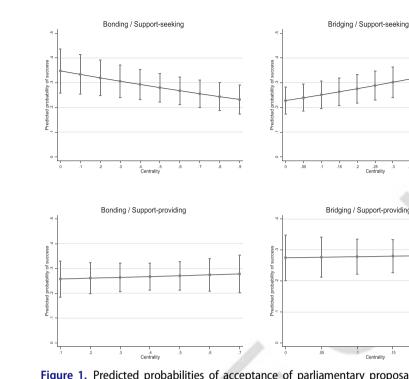
Do the relational resources of MPs, that is, their varying centralities in the co-sponsorship networks, impact their ability to have their proposals accepted and, therefore, to successfully influence the political agenda? And if yes, what is the most rewarding strategy? According to our first hypothesis, MPs' bridging centrality and the resulting ability to attract new, non-redundant information and support has a greater influence on agenda-setting success than bonding strategies focusing co-signature activities on one's own party family. Further, our second hypothesis posits that within the bridging strategy, efforts to seek co-signatures are more rewarding than efforts to provide co-signatures. Table 2 presents the results of a regression model including the four centrality measures.

We see from Table 2 that both bridging strategies have a positive influence on agenda-setting success. However, only one - the bridging/supportseeking strategy - has a statistically significant effect. We further observe that the bonding strategies have either no effect (support-providing) or a significant negative effect (support-seeking). These results are in line with our two hypotheses. Figure 1 helps us to better grasp the magnitude of the effects. It shows the probability of success of a parliamentary proposal as a function of MPs' centrality in the co-sponsorship network, while keeping the other variables at their mean or reference value.

On the one hand, one of the two bridging strategies pays off in terms of success (figures on the right-hand side). The top-right figure confirms that a higher bridging/support-seeking centrality is conducive to a higher Table 2. Determinants of acceptance of parliamentary proposals (unstandardized regression coefficients of a two-level mixed-effects logistic model).

regression coefficients of a two-level mixed-effects logistic in	nodei).
Bonding / support-seeking	_0.65*
Bridging / support-seeking	(0.26) 1.30***
bridging / support-seeking	(0.31)
Bonding / support-providing	0.18
Bridging / support-providing	(0.45) 0.17
bridging / support-providing	(0.80)
Party family: Left	-1.00***
Party family: Conservative right	(0.15) -0.49***
rarty family. Conservative right	(0.15)
Sex: Men	0.06
Region: West	(0.10) -0.23
region. West	(0.12)
Region: East	0.13
Region: Centre	(0.11) -0.04
region. Centre	-0.04 (0.16)
Region: South	0.08
Author's total number of proposals	(0.23) -0.00
Author's total number of proposals	(0.00)
Institutional type: Parliamentary initiatives	0.86***
hadden all town Dockslates	(0.09)
Institutional type: Postulates	1.02*** (0.07)
Number of co-signatures: 0	0.55**
Number of a signatures (legged)	(0.18) 0.35***
Number of co-signatures (logged)	(0.05)
Author's age (in years)	-0.01
Author's seniority (in hundred days)	(0.00) -0.00
Author's semonty (in number days)	(0.00)
Leadership position: party presidency	0.64*
Leadership position: head of faction	(0.27) -0.21
Leadership position. Head of faction	(0.26)
Leadership position: committee presidency	-0.09
Level of convergence (Hix index)	(0.19) 1.05
Level of convergence (filk index)	(0.60)
Introduction period 2003–2007	-0.25*
Introduction period 2011–2015	(0.11) -0.01
introduction period 2011–2013	(0.08)
Introduction year 1	0.20
Introduction year 2	(0.12) -0.01
introduction year 2	(0.09)
Introduction year 4	-0.01
Constant	(0.09) -2.17***
Constant	(0.54)
Observations	6′092
Number of groups (MPs) Log likelihood	370 -3205.2278
LOG INCINIOUS	-3203.2276

Notes: Standard errors in parentheses. \*\*\* p < 0.001, \*\* p < 0.01, \* p < 0.05. Reference categories: Moderate right (party family), North-west (region), Motion (institutional type), 2007–2011 (Introduction period), 3 (Introduction year).



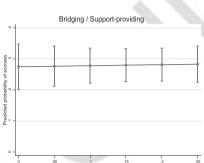


Figure 1. Predicted probabilities of acceptance of parliamentary proposals as a function of co-sponsorship strategies.

Note: Predicted probabilities are calculated for a 'standard' proposal with individual-level and proposal-level characteristics set at their means or reference values; the highest scores of centrality on the x-axes correspond to two standard deviations above the means.

agenda-setting success: the probability that a parliamentary proposal is accepted increases by 0.13 (from 0.23 to 0.36) between the lowest and highest level of centrality, i.e. by more than 50% in relative terms. By contrast, the bridging/support-providing centrality does not have any effect on agenda-setting success (bottom-right figure).

On the other hand, developing ties within one's party family is not rewarding. The bonding/support-providing strategy does not have any effect (top-left figure) and the support-seeking strategy is even counterproductive (bottom-left figure). The probability of acceptance of parliamentary proposals halves (from 0.35 to 0.16), between MPs who did not receive any co-signature and MPs who actively engaged in collecting cosignatures among MPs of their own party family.

In sum, the results confirm the superiority of the bridging over the bonding strategies (Hypothesis 1). These results support Kirkland's (2011) argument on the importance of weak ties in enabling MPs to garner new and non-redundant support for their parliamentary proposals. At the same time, they qualify Kirkland's findings, since they indicate that

it is not the support-providing strategy (out-degree centrality) but the support-seeking strategy (in-degree centrality) that is most rewarding (Hypothesis 2). While Kirkland (2011) did not test whether and to what extent the support-seeking strategy contributes to agenda-setting success, that strategy appears as the most effective in our data. Actively seeking out support and, to that end, being ready to modulate one's legislative proposals according to the reaction of one's peers and/or being able to anticipate them, increases MPs' agenda-setting success. Such an 'outwardlooking' strategy is perhaps especially important in a fragmented, multiparty system.

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Table 2 further shows that several control variables are indeed related to MPs' agenda-setting success. First, the results confirm differences in success across party families. Parliamentary proposals introduced by moderate right MPs are more successful than those of left-wing or conservative right MPs. The predicted probability of success is more than twice as high for moderate right MPs (0.27) than for left-wing MPs (0.12); conservative right MPs lie in between (0.19). Further, both parliamentary initiatives and postulates exhibit a higher likelihood of success than parliamentary motions (reference category). The number of co-signatures on the parliamentary proposal unsurprisingly has a strong positive influence on the likelihood of success. The predicted probability of passage increases by 0.30 as one moves from proposals with one co-signature to proposals with the highest number of co-signatures (i.e. more than 160). Yet that result is rather trivial. More important for our analysis is the fact that MPs' centrality in the co-sponsorship network influences the success of their parliamentary proposals, while controlling for the number of cosignatures. 16 Finally, the coefficient for the level of conflict in the issue area at stake has the expected sign (the likelihood of success increases with lower levels of conflict), but fails to reach statistical significance.

Given the strong differences in the success rate between party families, we go one step further and check whether the general pattern of centrality-related effects holds to a similar extent for left-wing, moderate right, and conservative right MPs. To this end, we fit a model including interaction terms between party family and the four centrality measures (Table 3; the full model with control variables appears in Supplementary material available online). As coefficients for interaction terms in logistic regressions are difficult to interpret, we base the interpretation on the predicted probabilities (Figure 2).

Figure 2 confirms the effects of the bridging/support-seeking strategy (top-right figure). For all three party families, the higher MPs' centrality, the higher the probability that their proposals are accepted. Yet the effect is stronger for left-wing and conservative right MPs than for moderate

**Table 3.** Determinants of acceptance of parliamentary proposals, with interaction terms (unstandardised regression coefficients of a two-level mixed-effects logistic model)

(unstandardised regression coefficients of a two-level mixed-effects lo	gistic model).
Bonding/support-seeking	0.04 (0.54)
Bridging/support-seeking	0.73
Danielin m/augus auto muscialin m	(0.60)
Bonding/support-providing	-0.25 (0.78)
Bridging/support-providing	-0.49
Party family: Left	(1.11) -1.11***
Tarty family. Left	(0.30)
Party family: Conservative right	-0.63*
Bonding/support-seeking * Left	(0.31) 0.36
bonding/support seeking Left	(0.69)
Bonding/support-seeking * Conservative right	-1.17
Bridging/support-seeking * Left	(0.64) 0.46
Shaging/support seeking Left	(0.76)
Bridging/support-seeking * Conservative right	0.62
Bonding/support-providing * Left	(0.90) 0.03
3 3	(0.98)
Bonding/support-providing * Conservative right	0.43
Bridging/support-providing * Left	(1.05) 1.23
	(1.87)
Bridging/support-providing * Conservative right	3.45 (2.17)
Controls: included	(2.17)
Constant	-2.05***
Observations	(0.56) 6092
Number of groups (MPs)	370
Log likelihood	-3200.4503

Note: Standard errors in parentheses. \*\*\* p < 0.001, \*\* p < 0.01, \* p < 0.05.

right MPs. For left-wing and conservative right MPs, the probability of success increases by 0.07 and 0.14, respectively, between least central and highly central MPs. The increase may seem small, but it is in fact sizeable since it corresponds to a 70% increase in relative terms. The effect is smaller for moderate right MPs (0.08 in absolute terms, but only 30% in relative terms).

The results for the bonding/support-seeking and for the bridging/support-providing strategies show even more contrasted results between the moderate right and the two other party families - and especially so with the conservative right. The figure on the top left indicates that the negative effects of the bonding/support-seeking strategy strongly hold for conservative right MPs, but much less so for left-wing MPs, and not at all for moderate right MPs. Similarly, the figure on the bottom right shows that, in contrast to the general trend depicted in Figure 2, co-signing proposals introduced by MPs who are further away ideologically (bridging/support-

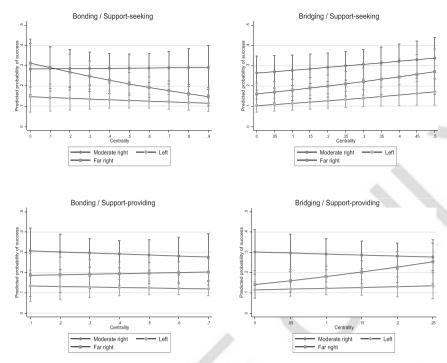


Figure 2. Predicted probabilities of acceptance of parliamentary proposals as a function of co-sponsorship strategies, across party families.

providing strategy) does have a positive influence on the odds of passage of proposals introduced by conservative right MPs (0.11 increase, more than 75% in relative terms).

Summing up, the additional analysis confirms the superiority of the bridging/support-seeking strategy, and highlights important differences in effects across parties. Agenda-setting success is most sensitive to co-sponsorship strategies among conservative right MPs, and least sensitive among moderate right MPs. The location of each party family on the ideological (left-right) spectrum, together with the related mechanisms of coalition formation in votes on parliamentary proposals, presumably account for these conditional effects.

As a result of their in-between position, moderate right MPs display little sensitivity to co-sponsorship strategies. Their parliamentary proposals are often moderate in nature and hence more prone to receive support from either left-wing or conservative right MPs (or both), regardless of moderate right MPs' centrality in the co-sponsorship network. By contrast, MPs from pole parties are more dependent on their ability to form coalitions in support for their parliamentary proposals. For them, actively seeking co-signatures beyond their own party camp appears as a

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rewarding strategy. Moreover, conservative right MPs relying on a bridging/support-providing strategy seem to benefit from log-rolling. The latter effect does not, however, hold for left-wing MPs, presumably because the centre-right coalition (i.e. moderate and conservative right MPs against left-wing MPs) is still the most frequent configuration in Swiss politics (Fischer and Traber 2015; Schwarz and Linder 2006).

#### Robustness tests

We submit our results to a series of robustness tests. We first estimate three different models to exclude the risk of reverse causality, i.e. the risk that the direction of the effect does not run from centrality to success but from success to centrality. In such a scenario, MPs would not be more successful because they are more central, but they would become more central because they have successfully introduced parliamentary proposals in the past. In the first test, we exclude from the analysis the parliamentary proposals that were voted on the same year they were introduced (Table A1 in the Supplementary material available online). Temporal precedence guarantees that centrality leads to success, and not the other way around. In the second test, we control for the overall success rate of MPs in introducing parliamentary proposals (Supplementary material Table A2). In the third test, we include MP fixed effects, which means that the coefficients for centrality only account for differences across time (and no longer for differences across MPs) (Supplementary material Table A3). Finally, we also estimate a model additionally controlling for the time elapsed between the day a proposal was introduced and the day it was voted (Supplementary material Table A4). As the tables in the Supplementary material available online show, the results are robust to all these challenging tests.

#### Conclusion

Introducing parliamentary proposals and asking for government action is an important part of MPs' legislative activities - and one that helps them to set the policy agenda and influence the law-making process. Legislators do not act in isolation, but depend on support from their peers to have their proposals accepted by the parliament and reach their policy goals. Relational resources associated with MPs' co-sponsorship activities play an important role in this respect. MPs' activities in co-signing proposals or having their proposals co-signed have a signalling function, and they help MPs to get support for their parliamentary proposals, when the latter are put to a vote.

While MPs have incentives to entertain relational resources and become more central in co-sponsorship networks, they are constrained by their limited time and resources. They must, therefore, act strategically. In this article, we have theoretically discussed and empirically assessed two strategic choices faced by MPs. The first relates to whether and to what extent they engage in bonding or bridging strategies, while the second concerns the relative emphasis MPs place on a support-seeking and a support-providing strategy.

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Empirically, our results confirm that centrality in the co-sponsorship network matters, but that the related strategies are not equally rewarding. First, in agreement with previous work in the US (Kirkland 2011), the findings highlight the superiority of the bridging strategy over the bonding strategy. Developing ties that cut across party family lines helps to reach non-redundant support and increases the odds of success of parliamentary proposals. By contrast, focusing co-sponsorship activities on one's party family has no effect at best, and is counterproductive at worst.

Second, and providing nuance to the findings of Kirkland (2011), in the Swiss context the bridging/support-providing strategy - that oriented towards actively co-signing proposals introduced by MPs not belonging to one's own party family - is not the most rewarding. That strategy in fact has no discernible effect overall. It increases the likelihood of agenda-setting success only for MPs of a specific party family. According to our results, the bridging/support-seeking strategy has the highest pay-off. MPs who consistently and repeatedly manage to attract co-signatures beyond their party family display a higher agenda-setting success than MPs who do not. Moreover, the positive side effects of the bridging/support-seeking strategy hold for all three party families, albeit more so for pole parties' MPs than for moderate right MPs.

The latter statement draws our attention to a third set of findings. In the Swiss multiparty context, the study of co-sponsorship yields more differentiated results across parties than in the bipartisan US context. In various cases, party family conditions the influence of relational resources. Overall, co-sponsorship strategies have stronger effects for pole parties' MPs than for moderate right MPs. Yet even among the MPs of pole parties, the strength of the effects varies. The agenda-setting success of conservative right MPs seems especially sensitive to co-sponsorship activities, and this for both good (the positive effects of bridging/support-providing centrality) and bad (the negative effects of the bonding/support-seeking centrality).

The reasons for those differences arguably relate to the location of each party family on the ideological spectrum and the related line-up of coalitions. On the one hand, conservative right MPs enjoy positive return from both support-seeking and support-providing activities with peers who are further away ideologically. On the other hand, conservative right MPs relying on a bonding/support-seeking strategy run the risk of closure

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and, therefore, of limited external support when their proposals are put to the parliamentary vote. However, that result may also be due to the fact that in the Swiss context, the conservative right party family mainly consists of one party (the Swiss People's Party), whereas the others are composed of several parties.

While some scholars have expressed concerns that legislative co-sponsorship is a form of 'cheap talk' (Kessler and Krehbiel 1996), our results suggest that specific types of co-sponsorship activities do matter for agenda-setting. The fact that our empirical tests control for a number of confounding factors, including the number of co-signatures supporting a given parliamentary proposal, and are robust to a number of model specifications, obviously increases the confidence in our findings.

That said, one limitation of our study is that it focuses on an early stage of the decision-making process. This calls for an additional analysis of the extent to which parliamentary proposals are subsequently translated into actual legislation. Further, we mainly examine the effect of network centralities. It would also be interesting to study how legislative networks come about in the first place, i.e. how and why MPs engage in supportseeking or support-providing activities, in and beyond their party family. To that purpose, complementing a quantitative approach with qualitative interviews with legislators to learn more about how they use and perceive co-sponsorship would certainly prove insightful. Finally, the single-case nature of our study is also a limitation. On the one hand, given the intermediary character of the Swiss parliament on the continuum from weak to strong parliaments, our findings regarding MPs' co-sponsorship strategies may travel well to other countries, particularly those with multiparty systems. On the other hand, there are differences between countries in how the institutional context influences the network, and co-sponsorship might have different meanings and functions across political systems (Briatte 2016; Ringe et al. 2016). In particular, one may assume that the importance of bridging ties varies as a function of the government system. It is presumably higher in a (near) presidential system or in a parliamentary system with a minority government, than in a parliamentary system with a majority government, strong party discipline, and a strict government-opposition divide. Going comparative and applying our fourfold conception of MPs' strategies to co-sponsorship activities in other countries also appears as a promising avenue for further research.

#### **Notes**

In Granovetter's (1973) conception strength is a function of the frequency of interactions, with strong ties being defined as people who see each other often, and weak ties as acquaintances who rarely interact. Yet weak ties may be crucial to bridge structural holes.

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- Likewise, Ringe et al. (2012) argue that legislators establish contacts with both political friends and enemies and use the information they receive from these contacts to increase their confidence in their own policy positions. They further claim that contacts between political allies have greater value the more the two allies agree on policy issues, whereas contacts between political adversaries have greater value the more the two adversaries disagree on policy issues.
- This notwithstanding, party discipline is fairly high in the Swiss parliament (Hug and Sciarini 2009; Schwarz and Linder 2007; Traber et al. 2014).
- In many of the 20 countries covered by Briatte's (2016) study, the number of co-sponsors per bill or parliamentary proposal is lower than 10, on average, but exceeds 25 or even 30 in a few countries (e.g. Finland and France). Switzerland belongs to the second set of countries with the highest number of co-sponsors per bill (about 20, on average, for the most recent legislative periods).
- Data are available at the Web Services of the Swiss Parliament (http://wsold.parlament.ch/); 55 additional parliamentary proposals introduced during the 49th legislative period were not yet treated at the time of writing and are consequently excluded from our analysis.
- If the committee rejects the initiative the process stops, except if the plenum overturns the decision of the committee.
- Once accepted, a parliamentary initiative leads to a bill (change), which will then need to be adopted by parliament. The same holds, of course, for motions and for postulates translating into bills.
- It is worth mentioning that most parliamentary initiatives that are supported by the specialised parliamentary committee are then accepted by the Chamber.
- Few proposals (about a dozen) are only partly successful, in the sense that they were either only partially adopted, or classified because the goal of the proposal was reached by another proposal or law. We coded them as successful.
- This means that a tie between two MPs is coded only from a co-sponsor to the author of the intervention, but not between two MPs who co-sponsor the same intervention without authoring it.
- The one co-signature threshold corresponds roughly to the average value of 11. co-signature among all MPs (0.8 in the 47th legislative period, 1.1 in the 48th legislative period, 0.8 in the 49th legislative period).
- While in-degree centrality gives the same weight to any tie, independently of whether another MP co-sponsored one or several proposals of the MP in question (Tam Cho and Fowler 2010), valued in-degree centrality adds up each co-sponsorship signature as a single tie (Opsahl et al. 2010). This means that an MP is equally central if they have one proposal with 10 cosponsors, or 10 proposals with one co-sponsor each. Preliminary tests show that in-degree and valued in-degree centrality correlate very strongly (Pearson's correlation above 0.8). For the sake of simplicity, we focus on the simpler in-degree measure.

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- Calculating centrality on a yearly, cumulative basis fits nicely with the conception of network ties formation as a dynamic process taking place over the course of a legislative period.
- More precisely, to cope with the fact that the log of 0 is undefined, in addition to the logged number of co-signatures, we create a dummy that takes the value 1 if the number of co-signatures is 0, and 0 otherwise.
- Note also that MPs' efforts to get signatures from their peers tend to go hand in hand with their availability at co-signing parliamentary proposals, especially with respect to the bonding strategy (the Pearson's correlation between in- and out-degree centralities amounts to 0.61, against 0.41 for bridging, N=370). Yet additional tests do not show collinearity problems, presumably owing to the high number of observations on the proposal level.
- Note that according to the coefficient for the dummy variable, proposals with no co-signature are more likely to be accepted than proposals with few co-signatures.

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#### References

Aleman, Eduardo, and Ernesto Calvo (2013). 'Explaining Policy Ties in Presidential Congresses: A Network Analysis of Bill Initiation Data', Political Studies, 61:2, 356-77.

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Berardo, Ramiro (2014). 'Bridging and Bonding Capital in Two-Mode Collaboration Networks', Policy Studies Journal, 42:2, 197-225.

Berardo, Ramiro, and John Scholz (2010). 'Self-Organizing Policy Networks: Risk, Partner Selection and Cooperation in Estuaries', American Journal of Political Science, 54:3, 632-49.

Bratton, Katheen, and Rouse Stella (2011). 'Networks in the Legislative Arena: How Group Dynamics Affect Cosponsorship', Legislative Studies Quarterly, 36:

Briatte, François (2016). 'Network Patterns of Legislative Collaboration in Twenty Parliaments', Network Science, 4:2, 266-71.

Corbett, Richard, Francis Jacobs, and Darren Neville (2007). The European Parliament, 7th edition. London: Jonh Harper Publishing.

Costello, Rory (2011). 'Does Bicameralism Promote Stability? Interinstitutional Relations and Coalition Formation in the European Parliament', West European Politics, 34:1, 122-44.

Craig, Alison W. (2015). Lone Wolves and Team Players: Policy Collaboration Networks and Legislative Effectiveness in the House of Representatives, Columbus: Ohio State University, Department of Political Science.

Fenno, Richard F. (1973). Congressment and committees. Boston: Little, Brown &

Fischer, Manuel, and Pascal Sciarini (2016). 'Drivers of Collaboration in Political Decision-Making: A Cross-Sector Perspective', The Journal of Politics, 78:1,

Fischer, Manuel, and Denise Traber (2015). 'Coalition Formation in Parliament and During the Policy Process', in Pascal Sciarini, Manuel Fischer, and Denise

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- Traber (eds.), Political Decision-Making in Switzerland: the Consensus Model under Pressure. Basingstoke: Palgrave Macmillan, 120-138.
- Fischer, Manuel, Frédéric Varone, Roy Gava, and Pascal Sciarini (2019). 'How MPs Ties to Interest Groups Matter for Legislative Co-Sponsorship', Social Networks, 57, 34-42.
- Fowler, James H. (2006a). 'Connecting the Congress: A Study of Cosponsorship Networks', Political Analysis, 14:4, 456-87.
- Fowler, James H. (2006b). 'Legislative Cosponsorship Networks in the US House and Senate', Social Networks, 28:4, 454-65.
- Freeman, Lin C. (1979). 'Centrality in Networks: I. Conceptual Clarification', Social Networks, 1:3, 215-39.
- Granovetter, Mark (1973). 'The Strength of Weak Ties', American Journal of Sociology, 78:6, 1360-80.
- Hix, Simon, Abdul Noury, and Gérard Roland (2005). 'Power to the Parties: Cohesion and Competition in the European Parliament, 1979-2001', British Journal of Political Science, 35:2, 209-34.
- Hug, Simon, and Pascal Sciarini (2009). 'Parties and Their Success in Swiss Parliament', in Adrian Vatter, Frédéric Varone, and Fritz Sager (eds.), Demokratie als Leidenschaft. Planung, Entscheidung und Vollzug in der schweizerischen Demokratie. Bern: Haupt, 117-36.
- Ingold, Karin, and Philip Leifeld (2014). 'Structural and Determinants of Reputational Power in Policy Networks', Journal of Public Administration Research and Theory, 26:1, 1-18.
- Jaquet, Julien M., Pascal Sciarini, and Frédéric Varone (2019). 'Policy-Agenda-Setting: Regierung als Hauptinitiator von Entscheidungsprozessen?', in Adrian Ritz, Theo Haldemann, and Fritz Sager (eds.), Blackbox Exekutive. Zurich: NZZ Libro, 133-213.
- Jones, Bryan D., and Frank R. Baumgartner (2005). The Politics of Attention: How Government Prioritizes Problems. Chicago: University of Chicago Press.
- Kessler, Daniel, and Keith Krehbiel (1996). 'Dynamics of Cosponsorship', American Political Science Review, 80:3, 555-66.
- Kingdon, John W. (1995). Agenda, Alternatives, and Public Policies. New York: Harper Collins College Publishers.
- Kirkland, Justin (2011). 'The Relational Determinants of Legislative Outcomes: Strong and Weak Ties between Legislators', The Journal of Politics, 73:3,
- Kirkland, Justin H., and Justin H. Gross (2014). 'Measurement and Theory in Legislative Networks: The Evolving Topology of Congressional Collaboration', Social Networks, 36:1, 97-109.
- Koger, Gregory (2003). 'Position Taking and Cosponsorship in the U.S', Legislative Studies Quarterly, 37:4, 649-67.
- Lijphart, Arend (1999). Patterns of Democracy. Government Forms and Performance in Thirty-Six Countries. New Haven: Yale University Press.
- Opsahl, Tore, Filip Agneessens, and John Skvoretz (2010). 'Node Centrality in Weighted Networks: Generalizing Degree and Shortest Paths', Social Networks, 32:3, 245-51.
- Ringe, Nils, Wendy Tam Cho, and Jennifer Nicoll Victor (2016). 'Legislative Networks', in Jennifer Nicoll Victor, (eds.), Oxford Handbook of Political Networks. Oxford: Oxford University Press.

Ringe, Nils, Jennifer Nicol Victor, and Justin H. Gross (2013). 'Keeping Your Friends Close and Your Enemies Closer? Information Networks in Legislative Politics', British Journal of Political Science, 43:3, 601-28.

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- Schnapp, Kai-Uwe, and Philipp Harfst (2005). 'Parlamentarische Informations-Und Kontrollressourcen in 22 Westlichen Demokratien', Zeitschrifift für Parlamentsfragen, 36:3, 348-70.
- Schwarz, Daniel, André Bächtiger, and Georg Lutz (2011). 'Agenda-Setting Power of the Government in a Separation-of-Powers Framework', in Bjorn Erik Rash and George Tsebelis (eds.), The Role of Government in Legislative Agenda Setting. London: Routledge, 127-143.
- Schwarz, Daniel, and Wolf Linder (2006). Mehrheits- und Koalitionsbildung im schweizerischen Nationalrat 1996-2005. Bern: Institut für Politikwissenschaft (Studie im Auftrag der Parlamentsdienste der schweizerischen Bundesversammlung).
- Schwarz, Daniel, and Wolf Linder (2007). Franktionsgeschlossenheit im schweizerischen Nationalrat 1996-2005. Bern: Institut für Politikwissenschaft (Studie im Auftrag der Parlamentsdienste der schweizerischen Bundesversammlung).
- Sciarini, Pascal, Manuel Fischer, and Denise Traber (eds.). (2015). Political Decision-Making in Switzerland: the Consensus Model under Pressure. Basingstoke: Palgrave Macmillan.
- Sciarini, Pascal (2014). 'Eppure Si Muove: The Changing Nature of the Swiss Consensus Democracy', Journal of European Public Policy, 21:1, 116-32.
- Sciarini, Pascal, Alex Fischer, and Sarah Nicolet (2002). 'L'impact de L'internationalisation Sur Les Processus de Décision en Suisse: Une Analyse Quantitative Des Actes Législatifs 1995-1999', Swiss Political Science Review, 8: 3-4, 1-34.
- Shugart, Mathew S., and John M. Carey (1992). Presidents and Assemblies. Cambridge: Cambridge University Press.
- Siaroff, Alan (2003). 'Varieties of Parliamentarism in the Advanced Industrial Democracies', International Political Science Review, 24:4, 445-64.
- Tam Cho, Wendy K., and James H. Fowler (2010). 'Legislative Success in a Small World: Social Network Analysis and the Dynamics of Congressional Legislation', The Journal of Politics, 72:1, 124–35.
- Traber, Denise, Simon Hug, and Pascal Sciarini (2014). 'Party Unity in the Swiss Parliament: The Electoral Connection', Journal of Legislative Studies, 20:2, 193-213.
- Turner-Zwinkels, Tomas, Oliver Huwyler, Stefanie Bailer, Elena Frech, Philip Manow, and Simon Hug (2019). 'Parliaments Day by Day: the Parliamentary Careers in Comparison Core Database'. Paper prepared for presentation at the EPSA General Conference Belfast, 2019.
- Vatter, Adrian (2016). Das politische System der Schweiz. Nomos: Baden-Baden.
- Victor, Jennifer N., Alexander Montgomery, and Mark Lubell, eds. (2017). Oxford Handbook of Political Networks. Oxford: Oxford University Press.
- Z'ggragen, Heidi, and Wolf Linder (2004). Professionalisierung der Parlamente im internationalen Vergleich. Studie im Auftrag der Parlamentsdienste der schweizerischen Bundesversammlung. Bern: Institut für Politikwissenschaft der Universität Bern.