National Parliamentary Coordination after Lisbon: A Network Approach

Philip Leifeld[*] [†] [‡] [§] and Thomas Malang[*]

[*]University of Konstanz, Department of Politics & Public Administration

[†]University of Konstanz, Zukunftskolleg

[‡]Eawag (Swiss Federal Institute of Aquatic Science and Technology)

[§]University of Bern, Institute of Political Science

June 25, 2014

Paper prepared for the 1st European Conference on Social Networks (EUSN), Barcelona, Spain, July 1–4, 2014.

Address for correspondence: Philip Leifeld, Eawag, Überlandstr. 133, CH-8600 Dübendorf, Switzerland, philip.leifeld@eawag.ch.

Abstract

The Treaty of Lisbon strengthens the role of national parliaments in the European Union by providing the so-called early warning system on the basis of subsidiarity concerns. Any parliamentary chamber can object to legislative proposals, but to gain legal influence on the EU's policy process, the national legislators have to reach a certain threshold of chambers expressing these subsidiarity concerns. The paper analyzes the factors influencing the coordination between national chambers. We argue that network effects (such as preferential attachment to proposals, proposal clustering, and attribute homophily) play a more important role for legislative coordination in this emerging supranational governance system than the properties of the respective national parliamentary chambers (majority party, capacity, level of political autonomy from the executive) or of the proposed legislation (procedure, policy sector, salience, volume of communication) alone. Based on a newly coded dataset including all national parliamentary action from 2010 to 2013, we estimate two-mode exponential random graph models to test our claims on the emerging cooperation network. Our findings confirm several homophily effects among parliaments: most importantly, parliamentary chambers coordinate along party lines, which indicates that this new governance instrument leads to European-level party politics for the first time in the history of the European Union.

1 Introduction

A stronger inclusion of national parliaments in the political system of the European Union has been advocated by politicians and scholars alike since the mid 1990s. It has often been proposed as a means to fight the “democratic deficit” of the Union and to battle the “de-parliamentarization” through European integration (Raunio 2009).

The Treaty of Lisbon established such a stronger inclusion of the national parliaments through the instrument of the early warning system (EWS) in 2009. The European Commission is instructed to forward every proposed piece of legislation to all chambers of the national parliaments. The chambers have the right to scrutinize the proposals and state their concerns if they conclude that the new legislation will violate the principle of subsidiarity. If the national chambers reach a certain level of reasoned opinions that state a subsidiarity concern, the Commission is forced to review the proposal again.

At the end of 2013, parliaments in Britain, Cyprus, Hungary, Ireland, Malta, the Netherlands, Slovenia, Sweden, Romania, as well as the French and Czech senates, rejected a proposal by the European Commission to create an EU prosecution office. This rejection was the second time that national parliaments reached the critical one third quorum for a so called “yellow card”. The participating chambers have very different characteristics. Two chambers are from the original six founding members, six chambers joined the EU after 2004, two of the largest and two of the smallest countries are represented, we can find chambers of presidential and parliamentarian systems, first and second chambers of bicameral systems, as well as unicameral chambers.

This variance in characteristics leads to three interrelated research questions: first, how can we explain parliamentary participation in the EWS, i. e., which attributes of parliaments determine individual veto actions of parliaments? Second, how can we explain veto success, i. e., what proposal attributes and network effects cause more than one chamber to gather around a given proposal? Third, a normative question:

does this new instrument really lead to an increased level of democracy in European decision making? The present paper will touch upon all three questions but will focus its attention on the two explanatory ones.

The main theoretical contribution of the paper is the development of an argument that goes beyond the attributes of chambers—like the presence of a second chamber, the level of Euroskepticism of the majority party, and the level of legislative leverage to control the executive—for explaining participation in the EWS. We rather argue that chambers' similarities of characteristics matter for explaining why certain chambers engage in joint legislative activity. EWS actions essentially constitute a network because they are triggered by relational, rather than individual, incentives. Our relational claim is that chamber similarity breeds joint action and thus homophily explains legislative coordination among parliaments. To substantiate this claim, we conduct a quantitative analysis of all EWS activity of all European parliamentary chambers from 2010 to 2013.

We conceptualize parliamentary activity (and thus veto success following from this activity) as a two-mode network of chambers (vertex mode 1), proposals (vertex mode 2) and reasoned opinions of the chambers on these proposals (the edges in the two-mode network). This allows us to break new ground by analyzing the complex dependencies among national parliaments using bipartite exponential random graph models (ERGM). Beside our substantive findings, the results underline the usefulness of the two-mode ERGM for the systematic study of political networks. Rather than analyzing co-occurrence patterns of proposals among actors (as frequently done in co-sponsorship analyses, for example), this approach gives us more leverage over the data-generating process because we can add model terms at the level of the proposals and because we avoid arbitrary dichotomization of weighted edges.

In the next section, we describe the status upgrade of national parliaments in the Treaty of Lisbon and classify the new scrutiny rights. In section 3, we outline our network theory of parliamentary action and deduce testable hypotheses. Section 4 describes our methods and provides an introduction to two-mode ERGMs and our operationalization. We present the results of our analysis in section 5. The last section provides a conclusion and discusses the normative implications of our results.

2 National parliaments after the Treaty of Lisbon

2.1 Functions of parliaments in foreign policy

The function of the legislature is to represent as much as it is to regulate (Slaughter 2004). As a result, legislators are most directly tied to territorially defined policies. Their characteristic to remain "resolutely national" (Slaughter 2004: 105), however, becomes more and more weakened and is expanded by a tendency to coordinate and cooperate at the international level, most likely with parliamentary counterparts around the world. The new interpretation and practice of legislators' behavior is commonly explained by a change in the global and regional interdependencies of nation states (Putnam 1988).

The general question then is, how do national parliaments exercise power on the international stage? The traditional answer is by controlling the national executive (Fish and Kroenig 2009; Martin 2000; Mezey 1979; Sieberer 2011). For European Parliaments, the most advanced empirical classification of parliamentary control rights is presented by Winzen (2012), suggesting a separation between parliamentary rights for information access, processing foreign affairs with a specialized committee, and enforcing mandates.

Beyond the classic control function, Slaughter (2004) suggests that many legislators are not content with their traditional role. They are seeking ways to exercise power directly on the international stage, mostly through direct networking with other national parliaments. The goal of these networking efforts is an exchange of information, mutual support, and coordination of joint action, the classic relations and currencies in international networks (Hafner-Burton and Kahler 2009; Keck and Sikkink 1998; Maoz 2011).

2.2 The early warning system

The European Union is the first international organization that established institutional rules for the inclusion of national parliaments in the supra-national decision making process. Historically, the inclusion of national parliaments in the institutional setup of the EU appeared on the agenda in the 1990s (Raunio 2009). It stems from the idea that parliamentarization at the EU level through the European Parliament (EP) does not suffice to legitimize European integration (de Ruiter 2013). The recognition of a democratic deficit at the level of the EU was present in the political and academic discourse (Moravcsik 2004; Follesdal and Hix 2006), accompanied by the diagnosis of a de-parliamentarization of national political systems (Maurer and Wessels 2001).

The European Convention tackled the issue using the obvious solution to enhance the role of the national elected bodies in the Union's decision-making process (Cooper 2012; Bellamy and Kröger 2012). A first step was the development of formal rules to strengthen governmental oversight by establishing European Affairs committees and granting them access to information on EU affairs (Winzen 2013). Studies on these formal rules, however, showed that only a small portion of European legislation was scrutinized by national parliaments and that the salience of an issue in terms of national importance and re-election was the best predictor for scrutinizing activities (Auel 2006; Winzen 2013).

The second and most recent upgrade of national parliaments is the introduction of a subsidiarity control, commonly referred to as early warning system (EWS) in the Treaty of Lisbon in 2009. For every legslative proposal by the Commission, Article 6 of Protocol 2 ("Principles of Subsidiarity") grants national parliaments the right to issue a *"reasoned opinion stating why it considers that the draft in question does not comply* *with the principle of subsidiarity"* within eight weeks from the date of transmission of a draft legislative act (European Union 2007: 150). Parliamentary chambers are supposed to veto a proposal if they come to the conclusion that the content of the proposed legislation is better regulated on the national than on the European level and therefore violates the Union's principle of subsidiarity. The innovative part of the EWS is the threshold character to enforce an official reaction by the Commission. Each national parliamentary chamber has one vote, in a unicameral system two votes, resulting in 56 votes in total. If a draft legislation is interpreted as a violation to the subsidiarity principle, formulated in reasoned opinions by at least one third of the votes of all chambers (19 votes), the European Commission has to review the draft, can however maintain the original after review. This so-called yellow card is accompanied by an orange card, calling for reasoned opinions by one half of the votes. In this case, the Commission can maintain, amend, or withdraw the proposed act, but must give a reasoned opinion in case of maintaining the act. All reasoned opinions are submitted thereafter to the Council and EP as co-legislators, which can overrule the Commission (by 55% in the Council and simple majority in the EP) (Neuhold and Strelkow 2012).

Analytically, the changes brought by the EWS call for an adjustment of the traditional reading, which emphasizes solely the passive control function of national parliaments in foreign affairs. First, in the sense of Tsebelis (2002), national parliaments become a real veto player without agenda-setting power. However, the object of a veto has changed from the national to the European executive, resulting in an asymmetric vetoing relation. Additionally, whereas the statement of a veto rests within the single chamber, a successful veto requires a form of collective action to reach the quorum. Hence, we consider national parliaments as asymmetric, collective veto players.

Second, Neuhold and Strelkow (2012) speak of a new "proactive" role of national parliaments in EU affairs. We partly agree with the recognition that national parliaments are allowed to become active before a legislative act has passed the European decision making process. However, parliaments are still passive in the sense that they only react to European proposals and do not actively set the agenda. They do, however, become active from an analytical perspective. Martin (2000) reminds us to carefully distinguish between action and influence when it comes to analyzing the power of the legislative.[1] The study of the EWS is primarily one of parliamentary action, not of influence. Hence, the "proactive" recognition can be defended in analytical terms.

Third, the role of information has changed through the EWS. Whereas the strengthened oversight functions in the 2000s were still based on asymmetric information distribution—the Commission opened the information to the national parliaments—, a horizontal/symmetric component entered through the EWS practice. Because the (temporary) rejection of a legislative proposal demands at least the legal participation of some other national chambers, parliaments started to generate information about the violation of the subsidiarity principle on their own. Additionally, they have a platform where they share this information with all other parliaments. This network character of information exchange marks the general change from a hierarchical to horizontal mode of governance. The main information source for a national parliament is no longer the European level, but the national peers in the network. In sum, national parliaments have the status of a collective veto player through the EWS. Even if their control function is still passive in nature, the horizontal way to generate and share information makes them a pro-active player in the European decision-making process. Since the success of the reasoned opinion depends mostly on the activation of peer chambers, the next section will develop a network theory of parliamentary control of European politics.

[1] "Influence" is defined as *"the ability of an actor to bring outcomes close to his preferred position"* (Martin 2000: 8) and is best measured by looking at patterns of outcomes. We focus on the process of decision making, hence on the "action" side.

3 A network theory of parliamentary action

The variance in parliamentary participation and eventually success in vetoing EU legislation can be best understood by distinguishing between three levels of analysis: the first level consists of properties of the parliamentary chambers which cause them to participate. The second level deals with properties of the proposals which make them attractive targets. The third level consists of dependencies among several parliaments or proposals across these two levels. Parliaments mutually influence their decisions to (co-)veto specific proposals, and proposals may tend to be opposed by the same groups of parliaments. This threefold distinction captures (single-chamber) *activity*, (single-proposal) *prominence*, and (multi-chamber) *homophily*, the network effects we are predominantly interested in.

In the network perspective we are adopting, our research objects consist of two different entities with attributes (the nodes in the network) and one relation (the ties or edges). The entities are the chambers and the proposals. Direct links are not possible between two chambers of between nodes; this is called a two-mode network or a bipartite graph. The relation in this graph is the veto that one chamber issues against one proposal. The overall network structure emerges when we look at the aggregate of the vetoing connections between all chambers and all proposals. An indirect relation (in network terminology, a two-path) exists between two chambers if they veto the same proposal. The same logic can be applied for relations between proposals. They are indirectly connected if they are vetoed by the same chamber.

In the following subsections, we first theorize about parliamentary coordination and homophily as network dependencies (the third level), which comprise the central element of our theory of parliamentary activity. On the basis of a general network theory, we deduce that if two chambers share a characteristic (for example, the same party family of the majority party), they are more likely to veto the same proposal than two chambers without this similarity. We subsequently theorize about chamber activity and proposal prominence as important control variables.

3.1 Homophily as a determinant of coordination

At the systemic level, we ask which properties of any parliament make it more likely that this parliament formally opposes a legislative proposal on which other chambers with the same properties have already stated their subsidiarity concerns. Homophily is the network concept behind our core hypotheses on the clustering of parliaments around proposals. Homophily means that nodes in the network tend to be connected when they are homogenous with regard to actor attributes (McPherson et al. 2001). Through interaction and routine behaviour, these homophilous ties determine to a great extent which information the actors receive—in our example which Commission proposals they perceive as critical.

Our theoretical backbone is the assumption that obtaining information and forming an opinion on an issue is costly for parliaments (Wonka and Rittberger 2014). The EU's multi-level polity offers organizational and programmatic links between chambers that reduce these costs. Most obviously, the parties offer such links. If party A of country 1 has developed a good argument why a certain proposal violates the subsidiarity principle, it is likely that the same party of country 2 adopts this position. This can be either because of trust in the party position, because of direct communication between the two parties, or because of joint information from the European party family A. Our first homophily hypothesis states:

Hypothesis 1 (party family homophily) *The likelihood of a given chamber to activate the EWS on a specific proposal increases with the number of other chambers ruled by a party from the same party family that also veto against the respective proposal.*

Taking into account coalition formation of national governments in European Council negotiations, there is one result that seems to be common to most analyses: there appears to be a north–south–east dimension that structures voting patterns (Hayes-Renshaw et al. 2006). The reason for this phenomenon is still open to interpretation. Some argue for a redistributive cleavage (Zimmer et al. 2005), others maintain the free-market versus regulated capitalism divide (Thomson et al. 2004), while a third group proposes shared political culture or similar preferences on the future of integration (Mattila 2009). All dimensions empirically boil down to the duration of EU membership. Countries from the same enlargement round share more similarities than across enlargement rounds.

Hypothesis 2 (EU accession homophily) *The likelihood of a given chamber to activate the EWS on a specific proposal increases with the number of chambers from the same enlargement round that also veto against the respective proposal.*

We expect similar homophily effects for political system attributes. The initial conditions of a chamber vary with the political system it is part of. Being part of a one- or a two-chamber system while other peer chambers are part of the same kind of system, for example, influences the likelihood of vetoing the same proposals as the peer chambers. We expect the same effect for being part of a presidential or a parliamentary system. Two chambers that both belong to a parliamentary system have the same constraints and opportunities.

Hypothesis 3 (political system homophily) *The propensity of a given chamber to activate the EWS on a specific proposal increases with the number of other chambers with the same political system attributes that also veto against the respective proposal.*

Network clustering can also take place at the level of legislative proposals. We argue that proposals with similar characteristics tend to be opposed by the same chambers. In particular, we suggest that functional salience drives proposal clustering: Proposals have different policy foci, and previous research has shown that different countries have different interests in specific policy issues (Warntjen 2012; Wlezien 2005). We therefore hypothesize an increased likelihood that chambers repeatedly veto proposals from the same policy field:

Hypothesis 4 (issue specificity) *The probability of a given proposal to be linked with a chamber increases with the number of proposals from the same policy sector that are also vetoed by the same chamber.*

3.2 Determinants of parliamentary activity

At the parliamentary level, five theoretical streams can contribute to the explanation of initiating an EWS statement. These factors are classic explanatory variables at the actor level: an actor's attributes influence its actions. We consider the inclusion of these factors as a necessary control which may produce some additional valuable insights into the behavior of national parliaments.

First, we account for the type of cameralism. Neuhold and Strelkow (2012) assume that (weak) upper chambers are prone to evading the dominance of the first chambers by getting increasingly involved in the scrutiny process. Eleven of the 28 European members have a bicameralist system.[2] The function of the second chambers is mainly the representation of regional or specific interests. Whereas the political majority of the first chamber—at least in parliamentary systems—is congruent with the respective government, second chambers represent more heterogeneous interests than a majority government. We therefore derive our first main effect (as a control variable):

Control 1 (second chamber) *The probability of stating a problem of subsidiarity is higher for second chambers.*

Second, resource mobilization theory (Jenkins 1983) has shown in organizational studies that the position in a network is significantly affected by the organizational resources at hand. We assume that a scrutiny engagement is costly in terms of resources. A higher resource endowment should therefore lead to a higher capacity to scrutinize EU legislation:

Control 2 (capacity) *Chambers with more resources veto more proposals.*

The third argument at the level of the chambers—learning—is also related to resource mobilization: actors in a network acquire competencies and status over time

[2] Actually, there are 13 systems with bicameralism but the Irish House of Oireachtas (consisting of the Dáil Éireann (the House of Representatives) and the Seanad Éireann (the Senate)) and the Spanish Cortes Generales (made up of the Congress of Deputies and the Senate) established joint committees where both chambers are represented and hence speak with one voice and two votes.

(Hoffman et al. 1990). Learning takes time and we expect more mature parliaments to be more active. We define maturity not as the age of the respective chamber but as the length of the EU membership of a nation. All national parliaments have to learn "the Brussels Game", and the duration of the ongoing membership should indicate their familiarity with it (Cross 2012; Leuffen et al. 2014).

Control 3 (EU membership duration) *The earlier the EU accession of a country, the higher the extent of activity of its parliament(s).*

Fourth, the EWS is a function to control the European executive. We expect the present possibilities of a national parliament to control its own government to have a spillover effect on the European level controls. In line with the capacity argument, more granted institutional control leads to a functional specialization which determines the general control capacity. Hence:

Control 4 (control) *Parliaments with more control rights use the EWS more often.*

Finally, every legislative proposal is a further step to an integrated Europe (Holzinger and Schimmelfennig 2012). The knowledge about variance in the support for integration should therefore have an effect on the likelihood of challenging integration steps.

Control 5 (EU opposition) *Parliaments with majority parties that generally oppose European integration are more active in the EWS.*

3.3 Determinants of proposal prominence

Slaughter (2004) argues that parliamentarians care mostly about re-election, thus higher benefits are expected from scrutinizing domestic issues in which voters show the biggest interest. These high salience issues have a redistributional rather than a regulatory character (Majone 1993). Other studies show that these salient issues play a pivotal role in vote-seeking strategies by politicians (Auel 2006; Auel and Raunio 2012).

Control 6 (salience) *National parliaments are more likely to use the EWS if a proposal has a redistributional character as compared to a regulatory one.*

Additionally, all kinds of proposals are sent to the national parliaments. We assume that salience for domestic parliaments increases when the proposals contain binding legislation as compared to all kinds of non-binding proposals like communications, white and green papers and all other kinds of non-legislative documents.

Control 7 (binding legislation) *Parliaments tend to oppose proposals that have binding legislative character.*

4 Methodology

In order to explain parliamentary coordination and evaluate our hypotheses, we estimate a rich statistical network model of reasoned opinions (hereafter: veto) as issued by the national parliaments.

4.1 Conceptualization and statistical approach

We conceptualize vetos as a two-mode network, or bipartite graph. A bipartite graph $G = (U, V, E)$ is composed of two classes of vertices, U and V (in this case 39 parliamentary chambers and 650 proposals), and the set of edges E between vertices of different classes, representing a veto of a parliamentary chamber against a specific proposal. The density of a graph is defined as the number of realized edges over the maximum number of edges possible. In a bipartite graph, this amounts to the following quantity:

$$d_G = \frac{|E|}{|U| \cdot |V|} \tag{1}$$

The network is very sparse compared to many other real-world networks ($d_G \approx 0.001$), which is mainly due to many proposals which are never referred to by any parliament (so-called "isolates", which have a degree of 0). The high number of isolates show that the coordination of parliaments is by far not fully developed yet. There are $|U| \cdot |V| = 25,350$ observations (present or absent ties), which are partly dependent on each other. Because of these complex dependencies between the observations, conventional statistical models like logistic regression are likely to suffer from artificially optimistic p values and biased estimates and are thus an inadequate choice (Cranmer and Desmarais 2011).

To model these dependencies explicitly, we employ exponential random graph models (ERGM), also known as $p*$ models (Frank and Strauss 1986; Robins et al. 2007a,b; Wasserman and Pattison 1996). ERGMs were recently introduced to political science (Cranmer and Desmarais 2011; Leifeld and Schneider 2012). They permit to model a network by describing how the network is composed of endogenous local structures like reciprocity, transitivity, or cycles and how its structure is additionally co-determined by exogenous covariates like nodal attributes or ties in another network relation that increase or decrease the tie probability of a dyad (for a primer, see Robins et al. 2007a).

Henceforth, the graph G is denoted by a rectangular matrix N with row actors referring to column proposals when the cell $n_{ij} = 1$ and 0 otherwise. In the ERGM, the probability of observing a given network over all permutations of the network one could potentially observe can be expressed as

$$P(N, \boldsymbol{\theta}) = \frac{\exp\{\boldsymbol{\theta}^T \boldsymbol{h}(N)\}}{\sum_{N^* \in \mathcal{N}} \exp\{\boldsymbol{\theta}^T \boldsymbol{h}(N^*)\}}, \tag{2}$$

where N is the observed network, $\boldsymbol{\theta}$ are the parameters to be estimated, $\boldsymbol{h}(N)$ is a vector of statistics to be included in the model (including the aforementioned endogenous and exogenous dependencies), and N^* refers to a particular permutation of the network from the set of all possible permutations of the network $\mathcal{N}$ (Leifeld and Cranmer 2014). Essentially, the denominator can be understood as a normalizing constant which guarantees that the probability scales to 1. In addition to this interpretation of the network as a single case in a universe of potential realizations of the same network, there is a second, local interpretation where the probability of any tie in the network depends on the very same statistics and parameters. Estimation of ERGMs is carried out via Markov Chain Monte Carlo Maximum Likelihood Estimation (MCMC MLE) because the search space is too large for conventional optimization techniques (Robins et al. 2007a).

Modeling two-mode rather than one-mode networks requires several tweaks: within-class ties must be prohibited during the estimation, and the statistics must be adjusted to the bipartite case (Wang et al. 2013). The latter point is not merely a methodological adjustment because it requires us to reformulate theories of tie formation in one-mode networks as two-mode mechanisms. For example, while clustering among nodes is expressed by closed triads in one-mode networks, clustering in two-mode networks can be expressed as four-cycles because within-class edges and hence k-cycles with odd k are not allowed (Robins and Alexander 2004).[3]

Most empirical applications of statistical network models overcome this problem by modeling a one-mode projection of the original network, for example the network of parliaments with weighted edges representing the number of proposals being co-cited by any actor pair. This is common practice in the analysis of cosponsorship networks because the identification of two-mode equivalents of the one-mode statistics of interest is not trivial. However, there is a trade-off: one-mode projections are denser, there is a loss of information due to the epimorphic transformation, ERGMs currently only work for binary network relations, and model terms and covariates for the second vertex class cannot be incorporated. A recurrent solution in the pertinent literature has been the dichotomization of edge weights at some threshold level, also known as "network thinning" (Alemán and Calvo 2013; Cranmer and Desmarais 2011). Yet, many of the problems persist, and additional, unnecessary assumptions are introduced. For this reason, we model transnational parliamentary communi-

[3] In our analysis, clustering is tested separately at the proposal level and at the parliamentary level using various homophily terms (see below). A four-cycle term would be correlated with these statistics and would lead to model degeneracy. We prefer to model these processes separately and therefore do not include the classic four-cycle parameter.

cation as a bipartite graph by constraining the set of possible edges and by finding sensible two-mode equivalents of one-mode network statistics and covariates (see next subsection).

We employ an ERGM that is agnostic of the timing of events because common statistical models for longitudinal networks make assumptions that our data would violate (e. g., panel data structure and the homogeneity of the network composition over time) and because relational event models for two-mode networks are just being developed (for a very recent attempt, see Quintane et al. 2014).

Estimation of the bipartite ERGMs is carried out using the `ergm` package (Hunter et al. 2008) and other tools from the `statnet` suite of packages (Handcock et al. 2003) for the statistical computing environment `R` (R Core Team 2014). Goodness-of-fit assessment was conducted using the `xergm` package (Leifeld et al. 2014). The results are reported using the `texreg` package (Leifeld 2013) for `R`.

4.2 Model terms

We devise the following types of model terms for the ERG models.

Edges

The number of *edges* in the graph serves to measure the baseline probability of establishing ties in the network. It can be interpreted like a constant in a conventional regression model. More specifically, it counts the number of edges in the network between any parliamentary chamber i and any proposal j:

$$h_{\text{edges}} = \sum_{i,j} n_{ij} \tag{3}$$

GWDegree for the first mode

The geometrically weighted degree distribution (*GWDegree*) of the first mode captures the distribution of activity of the parliamentary chambers (for details, see

Goodreau 2007; Hunter 2007). Some chambers may be more active than others, and the *GWDegree* statistic parametrizes this behavior by counting the number of nodes with degree i in vertex set U, weighting this count by a decay parameter, and summing up these weighted counts over all degree statistics in the first set of vertices. This can be expressed as

$$h_{\text{gwb1degree}} = e^{\theta_{s1}} \sum_{i=1}^{|U|-1} \{1 - (1 - e^{-\theta_{s1}})^i\} D_i(N|n \in U) \tag{4}$$

with $D_i(N|n \in U)$ denoting the number of nodes in the first mode of network N that have degree i, θ_{s1} denoting the decay parameter, and $|U|$ representing the number of vertices in the set of parliamentary chambers. If $\theta_{s1} = 0$, all degree counts are weighted equally. With increasing λ, a relatively higher weight is placed on higher degrees. In the current analysis, we chose to set $\lambda_1 = 2$ because this approximately maximizes the Bayesian Information Criterion (BIC), an indicator of the goodness of fit.[4]

GWDegree for the second mode

Similarly, we add a *GWDegree* term for the second class of vertices to model the degree distribution of proposals. Again, we set $\lambda_2 = 2$:

$$h_{\text{gwb2degree}} = e^{\theta_{s2}} \sum_{i=1}^{|V|-1} \{1 - (1 - e^{-\theta_{s2}})^i\} D_i(N|n \in V) \tag{5}$$

where V denotes the second set of vertices, the proposals, and θ_{s2} is the decay parameter for the second mode.

[4] We tried all configurations between 0.0 and 5.0 at intervals of 0.1. Endogenous optimization of the parameter has not been implemented yet in the `ergm` package for two-mode networks.

Nodal covariates of the first mode

We add several main effects for *nodal covariates of the parliamentary chambers.* The higher the attribute value of node i, the more or less likely an edge from node i is to emerge. These attributes can be binary or metric variables, for example the capacity, membership status, or type (coded as a binary variable) of a parliament. Given attribute a_i, the corresponding model term can be expressed as

$$h_{a_i} = \sum_j n_{ij} a_i \tag{6}$$

Nodal covariates of the second mode

Similarly, we can add main effects for *nodal covariates of the proposals*, for example whether proposal j is associated with a particular procedure like ordinary legislative procedures ("co-decision"):

$$h_{a_j} = \sum_i n_{ij} a_j \tag{7}$$

Homophily on the first mode

A theoretical mechanism of primary interest in network analysis is *homophily* (Goodreau et al. 2009; McPherson et al. 2001). In one-mode networks, homophily is represented by matching nodal attributes: a tie between i and j is formed whenever i and j have the same value on an attribute. For example, if the majority parties of both parliamentary chambers belong to the same party family, or if both parliaments are from countries with two-chamber systems, the two parliaments are likely to establish a direct tie. In two-mode ERGMs, modeling homophily on binary attributes is slightly more complex and can be modeled as follows:

$$h_{\text{homophily}_i} = \sum_j \sum_k n_{ij} n_{jk} a_i a_k \tag{8}$$

The tendency of parliament i to form homophilous ties is captured by the number of times other parliaments k with the same attribute value as i choose to connect to the same proposals j as the focal parliament i. In other words, if i decides whether or not to establish edge n_{ij}, this decision is contingent on the incoming other edges the legislative proposal possesses. If these other ties are formed by similar actors as i, this edge has a high probability to be established. This quantity is summed up over all proposals to assess the overall tendency of node i to be homophilous on attribute a_i. For example, parliaments governed by conservative parties may decide to criticize proposals when the proposals are also criticized by other parliaments with conservative majorities. Or chambers may be homophilous in the sense that first chambers tend to issue statements about the same proposals as other first chambers, while second chambers may tend to issue statements about the same proposals as other second chambers.

Clustering on the second mode

A similar mechanism is what we call *clustering* on the second vertex mode. The model term is similar as in the previous case of *homophily*, but as proposals cannot make any deliberate choices, we prefer to speak of *clustering*. This can be expressed as

$$h_{\text{clustering}_j} = \sum_i \sum_k n_{ij} n_{ik} a_j a_k \tag{9}$$

where, this time, j and k denote vertices from the set of proposals while i represents a parliament. If proposal j and proposal k both share the same attribute, then both should be connected to the same parliament. The reason is not a deliberate choice by the proposals, but rather by the parliament: parliament i tends to attach to proposals of the same type because of specific issue endowments of parliaments or countries ("salience"). For example, if any two proposals are both issued by the same Directorate General of the European Commission (the attribute), then parliament i

may be inclined, due to its latent interest in the topic, to issue communications about both proposals. This leads to attribute-based clustering of proposals in the network.

4.3 Data availability

Our relational dependent variable is based on the structure "chamber vetos proposal". This variable was obtained by a complete coding of parliamentary action on the IPEX homepage.[5] IPEX, the InterParliamentary EU information eXchange, is a platform for the mutual exchange of information between the national parliaments concerning issues related to the European Union. The database contains all draft legislative proposals, consultation and information documents coming from the European Commission. They are uploaded as soon as the Commission sends them to the EP and the Council. National parliaments can then individually upload information on each proposal. They have the possibility to send important informations about the proposal to all other parliaments, state some subsidiarity concerns, or, as a final step, issue a reasoned opinion.

We coded all documents for which parliamentary communication or a reasoned opinion (i. e., all parliamentary activity) followed for the years 2010–2013. The Treaty of Lisbon, which implemented the new powers, was signed at the end of 2009, so the start date 2010 is naturally given. Our coding efforts resulted in 650 proposals[6] with 325 reasoned opinions.[7]

The independent variables at the nodal level were collected from several databases. "First chamber" indicates a lower house as listed in the IPEX. "Capacity" is operationalized as the size of a chamber measured by its number of seats. "New member state" captures if a chamber is from the old EU 15 or joined the Union after 1995.

[5] http://www.ipex.eu/IPEXL-WEB/home/home.do (last access: April 29, 2014).

[6] Four proposals were listed on the IPEX homepage but do apparently not exist. We removed these proposals from the dataset before conducting the analysis.

[7] There are 27 cases where a chamber issued more than one reasoned opinion on the same proposal (9 % of all ties or 0.001 % of all observations), but these cases are administrative artifacts because a parliament can technically only issue one reasoned opinion per proposal. The two-mode matrix was therefore dichotomized.

For the homohily test "enlargement round", we created a variable that captures all eight rounds of enlargement. "Control" is the variable that captures the actual level of control rights, taken from Winzen (2012).[8] The index of "bicameralism" and the type of the "political system" come from Armingeon's Comparative Political Data Set III (Armingeon et al. 2010). A measure for the general anti-EU attitudes of a party is the mentioning of EU ressentiments in party programs as captured by the Manifesto Project (Volkens et al. 2013). From the same source, we use the classification of party families of the majority party. When the majorities changed over time, we took the value for the majority with the longest period in power.

At the level of the proposals, we cross-checked every proposal with the EU's PreLex database to get information about the Directorate General (DG) in charge of the proposal. This serves as a measure of the respective policy domain of a proposal. Furthermore, we introduced "DG Agriculture" as a dummy variable into our models. Agriculture is still the policy sector with the highest budget. To test our domestic salience hypothesis, the inclusion of "DG Agriculture" should be a good proxy because these are really redistributive policies. Additionally, we coded if the proposal has a binding legislative character or is non-binding.

The appendix presents summary statistics of all variables and visualizes the distribution of parliamentary activity per country and year as well as the prominence of proposals per year.

5 Analysis and discussion

Table 1 presents the results of two ERG models. The first model contains the full model specification including all model terms, and the second model is a reduced model retaining only significant results. This procedure is justifiable on the grounds

[8] Croatia joined the European Union and July 2013, hence no recent data about "control" are available for Croatia (= 2.56 % missing data in the "Control" variable). Similarly, three values are missing in the "EU/EC negative mentions" variable (= 7.69 %). We used multiple imputation based on the other nodal attributes to impute these missing values. The imputation was carried out using the `mice` package (Buuren and Groothuis-Oudshoorn 2011) for `R`.

	Full model	Reduced model
Edges	-28.05 (1.60)***	-27.60 (1.66)***
Chamber level:		
Party family homophily	1.17 (0.12)***	1.19 (0.13)***
Enlargement round homophily	1.95 (0.17)***	1.94 (0.15)***
First chamber homophily	0.47 (0.12)***	0.46 (0.10)***
Bicameralism homophily	0.95 (0.16)***	0.93 (0.17)***
Political system homophily	0.77 (0.10)***	0.73 (0.09)***
Two-chamber system homophily	0.84 (0.14)***	0.85 (0.13)***
GWDegree (first mode)	-1.25 (0.37)***	-1.26 (0.41)**
First chamber	-0.69 (0.22)**	-0.71 (0.21)***
Bicameralism	-0.34 (0.11)**	-0.27 (0.11)*
(Semi-) presidential	0.47 (0.31)	
Capacity	0.01 (0.31)	
New member state	-0.83 (0.22)***	-0.81 (0.22)***
Control	0.06 (0.17)	
EU/EC negative mentions	0.19 (0.17)	
Proposal level:		
DG clustering	0.29 (0.07)***	0.29 (0.07)***
GWDegree (second mode)	23.05 (1.47)***	22.72 (1.57)***
Binding decision	0.42 (0.25)$^{\cdot}$	0.46 (0.25)$^{\cdot}$
DG Agriculture	0.64 (0.48)	
AIC	1398.29	1394.25
BIC	1552.96	1508.22
Log Likelihood	-680.14	-683.12

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$, $^{\cdot}p < 0.1$

Table 1: Bipartite ERGMs of the reasoned opinion two-mode network

of parsimony: a more parsimonious model is ultimately to be preferred to a less parsimonious model on theoretical grounds. A model with the same explanatory power (as measured by the area under the curve or the log likelihood) and fewer parameters is preferable as the final model. In this regard, table 1 shows slightly lower AIC and BIC values for the reduced model.

We subdivided our results table into a chamber section (mode 1) and a proposal section (mode 2). Within each of these groups, the hypothesized homophily effects are shown above the individual-level factors for the chamber and the proposal characteristics. The next two subsections discuss the individual-level factors and the network effects, respectively.

5.1 Individual-level effects: chamber characteristics

We developed five control variables to explain the general activity of national parliamentary chambers in the context of the EWS. First, we find support for the cameralism effect suggested by Neuhold and Strelkow (2012). Second chambers are significantly more active in initiating the EWS than first chambers.

The test of resource mobilization theory, which we developed into a capacity and a learning argument, gets no coherent support. Our results indicate no significant relationship between resource endowment ("capacity") and activity. The learning argument—operationalized by the dummy of being a new member state—shows the expected negative effect, meaning that the "old" EU15 states are more active than the 13 new members.

The spillover argument states that already existing control possibilities of national parliaments should increase their activity with the EWS. However, we find no support in our data for such a mechanism.

Our last control variable at the chamber level stated that general opposition against further EU integration should increase chamber activity. But again, our analysis does not confirm the antagonism conjecture. Chambers that are dominated by a more European-skeptical party do not issue more EWS documents than European-friendly chambers.

5.2 Individual-level effects: document characteristics

The salience hypothesis argued that parliamentarians are office-seekers. They will therefore only activate the EWS if the proposed legislative act has redistributional characteristics that are perceived at the domestic level. As an extreme case, we control for whether a proposal is about agriculture, the policy sector with the highest redistributional budget. Our results show weak support for the salience hypothesis; chambers are slightly more likely to challenge proposals from DG Agriculture than from any other DG.

The literature on EU politics additionally suggested that the nature of the proposed document can have an effect on general activity. Standard binding legislation should receive more feedback than other forms of proposals like opinions, suggestions and strategy documents. Again, our analysis shows a weak and inconsistent effect for the type of procedure.

Overall, a model that takes only characteristics at the chamber or proposal level into account produces at most mediocre results. On top of these control variables, we therefore test in the next step more complex network dependencies that may fit better to the reality of parliamentary action. Since chambers need a certain amount of peer chambers that activate the same EWS for achieving a yellow or orange card, we argue that the similarity of chambers accounts for a big portion in the variance of whether parliamentary chambers choose to act on a specific proposal.

5.3 Network-level effects

Our main argument is that homophily plays a central role in governing the scrutiny processes: the likelihood of one chamber starting an EWS action increases with the number of chambers with similar attributes that are also connected to the focal proposal.

The first hypothesis deals with the information scarcity of chambers. We argued that parliaments cluster around proposals by majority party homophily in order to reduce information costs and maximize ideological fit with their peers. And indeed, this is a very robust and substantial predictor for the likelihood that a further chamber will activate the EWS on a given proposal. On average, an additional other chamber with the same majority party family, which opposes the same proposal, approximately triples ($\exp(1.17) \approx 3.22$) the odds of the focal chamber to oppose this proposal as well.

The second hypothesized similarity between chambers that should influence the likelihood of joining an EWS was the affiliation with the same enlargement cohort. So far, the EU consists of eight enlargement groups, starting with the original six founding members up to the latest member Croatia. Our results indicate that the members of the different rounds cluster heavily in their EWS action. The fact that some chambers of the same enlargement round already stated a reasoned opinion increases the likelihood of another chamber joining the protest significantly.

Another homophily dimension is the similarity of the political system a parliament in embedded in. We introduce four measures for capturing the effect: similarity of the political system in general, similarity on the dimension of unicameralism versus bicameralism, similarity regarding the strength of bicameralism, and similarity on the dimension first chamber versus second chamber. Our results again show strong support for the systemic homophily hypothesis. All four indicators show a significant positive effect for both EWS actions. Knowing the systemic characteristics of other chambers that are issuing a veto towards a proposal facilitates the prediction of a following chamber, because chambers with the same characteristics have a higher likelihood to join their EWS forces.

The final homophily argument was hypothesized on the proposal dimension. We deduced in the functional salience hypothesis that chambers will cluster around proposals in the same policy sector. The underlying mechanism was the assumption that salience is not randomly distributed across countries, rather countries (and their chambers) have specific interests in different policy sectors. We thus hypothesized that proposals from the same policy sector will cluster per country. As we can see in the results for DG clustering, the empirical evidence supports this homophily claim.

We can interpret the substantive effects of the independent variables by the size of the coefficients. The results indicate that all measures of homophily at the level of the chamber have a much higher impact on the likelihood of a tie than most of the main effects at the attribute level. The largest substantive effects are the homophily terms for the enlargement round and the ruling party. This is notable for two reasons. On the one hand, the enlargement round finding supports previous empirical evidence regarding Council voting patterns, where the north–south–east divide, as captured by the enlargement rounds, is also present. On the other hand, our results add a political party dimension to the decision-making literature. So far, party positions were a rather weak and inconsistent predictor at the European level. This led theorists to diagnose a democratic deficit because of the missing party cleavage at the European level. Our results suggest that at least cooperation between national legislatures is heavily dependent on the party dimension.

Overall, our analysis delivers strong support for the homophily hypotheses. Standard attributes on the chamber and the proposal level showed a rather inconsistent picture. Most chamber attributes do not increase the likelihood for starting an EWS action. To the contrary, our homophily measures showed consistent, stable, and robust predictions for the emergence of EWS actions across our models. Chambers therefore act not solely because they can, but because peer chambers with similar attributes already stated a concern towards a given proposal.

5.4 Goodness of fit

Figure 1 presents boxplots of typical network characteristics in 1,000 simulated networks and compares them to the same network statistics estimated from the observed network, as visualized by the solid black line running through the boxplots. The frequencies are depicted on a log scale to make even small values visible. The dyadwise shared partner distribution and the degree distribution of the 1,000 simulated networks are very similar to the distributions in the originally observed network. Geodesic distances between 6 and 8 are slightly off the mark, otherwise geodesic distances are also well captured by the model. Finally, the general properties of the

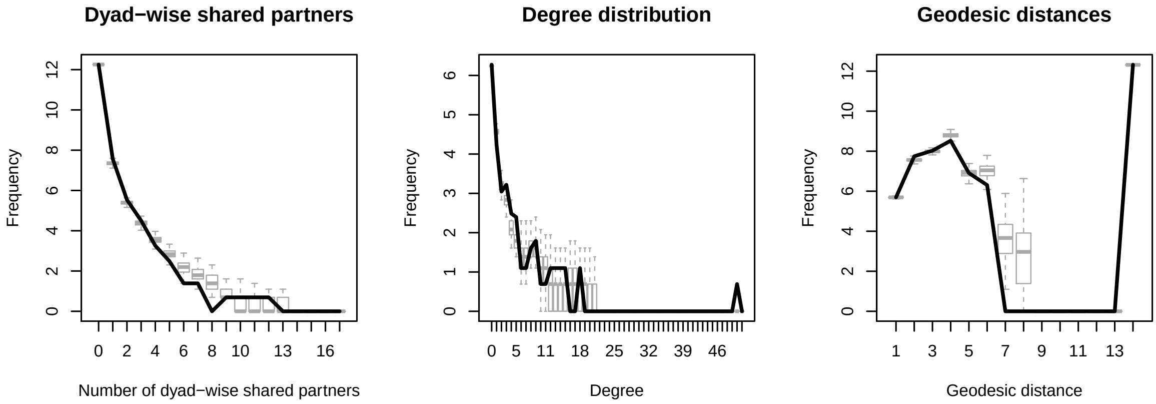
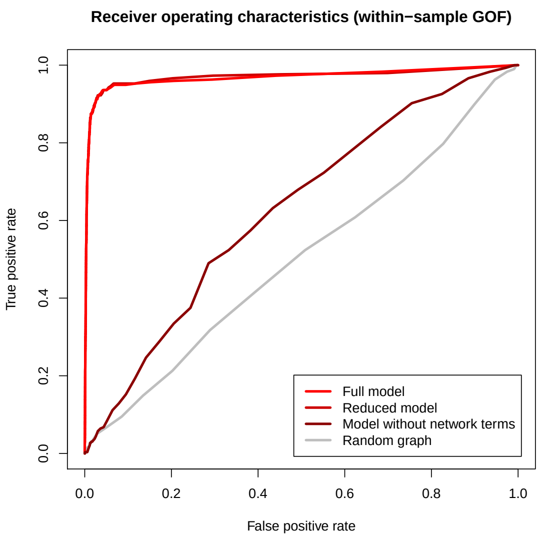
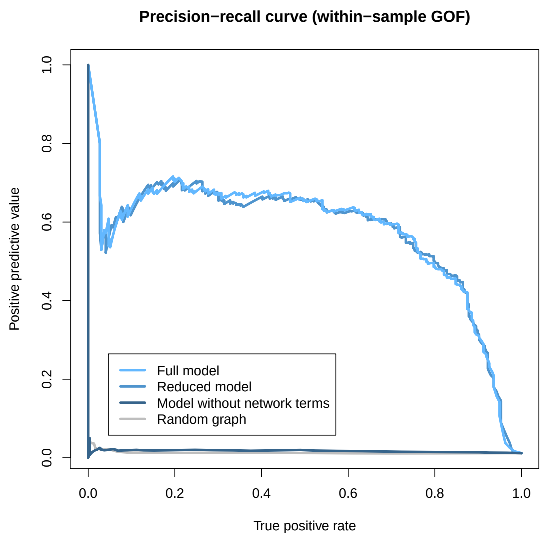


Figure 1: Goodness-of-fit assessment for the reduced models.



(a) ROC curve



(b) PR curve

Figure 2: Comparison of ROC and precision-recall curves for several models.

k-star distribution are captured well, albeit with a slight downward bias. Overall, the model fit is very good.

Figure 2a shows receiver operating characteristic (ROC) curves for the full and the reduced model specification, an additional specification without any network model terms (exluding homophily, clustering, and the degree distributions), and a random graph with the same density as the reasoned opinion network as a benchmark. Figure 2b presents precision–recall curves for the same set of models.

The use of these goodness-of-fit diagnostics for statistical network models was proposed by Cranmer and Desmarais (2011) and later employed by Leifeld and Cranmer (2014) for assessing out-of-sample predictive performance in TERGMs and stochastic actor-oriented models (SAOM). We use these plots to assess within-sample goodness-of-fit. The curves tell us how well the model (more specifically, simulations from this model) can eventually predict the original data. In each case, this within-sample classification performance is compared to a null model which only includes an edges term, i. e., to a random graph with the same density. While the ROC plot assesses the true positive rate versus the false positive rate, the PR curve is not contingent on the number of realized edges. Therefore, the PR curve may be more accurate here given the low network density. Both measures, however, indicate a very good fit of the model, further increasing our confidence in the results reported above. Moreover, one can see that the network model terms like homophily and the degree distribution explain most of the variance. The area under the curve for all models is portrayed in the appendix.

We can employ the area under the precision-recall curve (AUC) also for checking the relative importance of several model terms. To accomplish this, we estimate the reduced model with and without a specific model term, subtract the AUC value of the latter from the former AUC value, and express this as a share of the former AUC value. It turns out that party homophily contributes 17.3 %, enlargement homophily 14.9 %, GW2Degree 28.5 %, edges 41.8 %, and the new member state main effect does not contribute anything to the area under the curve and hence model fit. This underlines the importance of the network and homophily terms for the data-generating process.

Model degeneracy has been carefully checked by inspecting the MCMC trace, the consistency of results across estimation runs, the duration of the estimation, and by monitoring the log likelihood improvements between MCMC iterations. There are no signs of degeneracy.

6 Conclusion

The introduction of the early warning system (EWS) with the Treaty of Lisbon is the latest step to enhance the democratic quality of the EU. Since the end of 2009, national parliaments can scrutinize every EU legislative proposal and state a reasoned opinion if they see a violation of the subsidiarity principle. The Commission has to react if at least one third of the national chambers undertake EWS action on the same proposal.

The present paper develops a network theory to explain the distribution of EWS action of parliamentary chambers on legislative proposals. In addition to the standard attribute-based explanations (e. g., capacity of a chamber leads to an increased EWS activity), we present an explanation based on homophily. We hypothesize that because of information and resource constraints, national parliaments look at peer chambers and act accordingly. For example, we hypothesize that chambers ruled by the same party family will have more EWS action in common.

Whereas the individual attributes of parliaments and proposals offer only a weak explanation for the variation in EWS activity, our relational measures have a consistent and significant impact. Parliaments cluster their activity on the basis of similarity. The strongest predictor found is the party family of the ruling party. If parliaments with the same majority already started an EWS action, the likelihood that another chamber from the same party family will join in increases significantly.

This is particularly notable because previous research on European politics has never found consistent support for party politics at the EU level.

Our results have implications for scholars and decision makers contributing to the discussion about the democratic deficit of the EU. One of the core dimensions of the deficit argument is the weak role of political parties in the programmatic contestation over leadership and policy at the European level (Follesdal and Hix 2006). Our results show that programmatic contestation over policy is present in the national parliaments and their European-wide activity. Therefore, party programs and parliamentarians no longer stay resolutely national—they transfer their political program onto the European stage. This re-parliamentarization through the EWS is one significant improvement of EU democracy.

References

Alemán, E. and Calvo, E. (2013). Explaining policy ties in presidential congresses: A network analysis of bill initiation data. *Political Studies*, 61(2):356–377.

Armingeon, K., Careja, R., Engler, S., Potolidis, P., Gerber, M., and Leimgruber, P. (2010). Comparative political data set iii 1990-2008.

Auel, K. (2006). The Europeanisation of the German Bundestag: Institutional change and informal adaptation. *German Politics*, 15(3):249–268.

Auel, K. and Raunio, T. (2012). Introduction: National parliaments, electorates and EU affairs. In Auel, K. and Raunio, T., editors, *National Parliaments, Electorates and EU Affairs*, pages 7–28. Institut für Höhere Studien, Wien.

Bellamy, R. and Kröger, S. (2012). Domesticating the democratic deficit? The role of national parliaments and parties in the EU's system of governance. *Parliamentary Affairs*, pages 1–21.

Buuren, S. and Groothuis-Oudshoorn, K. (2011). mice: Multivariate imputation by chained equations in R. *Journal of Statistical Software*, 45(3):1–67.

Cooper, I. (2012). A 'virtual third chamber'for the European Union? National parliaments after the Treaty of Lisbon. *West European Politics*, 35(3):441–465.

Cranmer, S. J. and Desmarais, B. A. (2011). Inferential network analysis with exponential random graph models. *Political Analysis*, 19(1):66–86.

Cross, J. P. (2012). Interventions and negotiation in the council of ministers of the European Union. *European Union Politics*, 13(1):47–69.

de Ruiter, R. (2013). Under the radar? National parliaments and the ordinary legislative procedure in the European Union. *Journal of European Public Policy*, 20(8):1196–1212.

European Union (2007). Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community. *Official Journal of the European Union*, 50:1 – 231.

Fish, M. S. and Kroenig, M. (2009). *The Handbook of National Legislatures: A Global Survey*. Cambridge University Press.

Follesdal, A. and Hix, S. (2006). Why there is a democratic deficit in the EU: A response to Majone and Moravcsik. *JCMS: Journal of Common Market Studies*, 44(3):533–562.

Frank, O. and Strauss, D. (1986). Markov graphs. *Journal of the American Statistical Association*, 81(395):832–842.

Goodreau, S. M. (2007). Advances in exponential random graph (p*) models applied to a large social network. *Social Networks*, 29(2):231–248.

Goodreau, S. M., Kitts, J. A., and Morris, M. (2009). Birds of a feather, or friend of a friend? Using exponential random graph models to investigate adolescent social networks. *Demography*, 46(1):103–125.

Hafner-Burton, E. M. and Kahler, M. (2009). Network analysis for international relations. *International Organization*, 63(03):559–592.

Handcock, M. S., Hunter, D. R., Butts, C. T., Goodreau, S. M., and Morris, M. (2003). *statnet: Software Tools for the Statistical Modeling of Network Data*. Seattle, WA. http://statnetproject.org (last access: February 18, 2014).

Hayes-Renshaw, F., Van Aken, W., and Wallace, H. (2006). When and why the EU Council of Ministers votes explicitly. *JCMS: Journal of Common Market Studies*, 44(1):161–194.

Hoffman, A. N., Stearns, T. M., and Shrader, C. B. (1990). Structure, context, and centrality in interorganizational networks. *Journal of Business Research*, 20(4):333–347.

Holzinger, K. and Schimmelfennig, F. (2012). Differentiated integration in the european union: Many concepts, sparse theory, few data. *Journal of European Public Policy*, 19(2):292–305.

Hunter, D. R. (2007). Curved exponential family models for social networks. *Social Networks*, 29(2):216–230.

Hunter, D. R., Handcock, M. S., Butts, C. T., Goodreau, S. M., and Morris, M. (2008). ergm: A package to fit, simulate and diagnose exponential-family models for networks. *Journal of Statistical Software*, 24(3):1–29. http://www.jstatsoft.org/v24/i03/ (last access: February 18, 2014).

Jenkins, C. (1983). Resource mobilization theory and the study of social movements. *Annual Review of Sociology*, pages 527–553.

Keck, M. E. and Sikkink, K. (1998). *Activists Beyond Borders: Advocacy Networks in International Politics*, volume 35. Cambridge Univ Press.

Leifeld, P. (2013). texreg: Conversion of statistical model output in R to LaTeX and HTML tables. *Journal of Statistical Software*, 55(8):1–24. http://www.jstatsoft.org/v55/i08/ (last access: February 18, 2014).

Leifeld, P. and Cranmer, S. J. (2014). A theoretical and performance-based comparison of the temporal exponential random graph model (TERGM) and the stochastic actor oriented model (SAOM). Paper presented at the 2014 Annual Meeting of the Swiss Political Science Association (SVPW), Bern, Switzerland, January 30.

Leifeld, P., Cranmer, S. J., and Desmarais, B. A. (2014). *xergm: Extensions of Exponential Random Graph Models*. R package version 1.0. http://cran.r-project.org/package=xergm.

Leifeld, P. and Schneider, V. (2012). Information exchange in policy networks. *American Journal of Political Science*, 56(3):731–744.

Leuffen, D., Malang, T., and Wörle, S. (2014). Stucture, capacity or power? Explaining salience in EU decision-making. *JCMS: Journal of Common Market Studies*, 52(3):616–631.

Majone, G. (1993). The European Community between social policy and social regulation. *JCMS: Journal of Common Market Studies*, 31(2):153–170.

Maoz, Z. (2011). *Networks of Nations: The Evolution, Structure, and Impact of International Networks, 1816-2001*, volume 32. Cambridge University Press.

Martin, L. L. (2000). *Democratic Commitments: Legislatures and International Cooperation*. Princeton University Press.

Mattila, M. (2009). Roll call analysis of voting in the European Union Council of Ministers after the 2004 enlargement. *European Journal of Political Research*, 48(6):840–857.

Maurer, A. and Wessels, W. (2001). *National Parliaments on their Ways to Europe: Losers or Latecomers?* Nomos.

McPherson, M., Smith-Lovin, L., and Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27(1):415–444.

Mezey, M. L. (1979). *Comparative Legislatures*. Duke University Press Durham, NC.

Moravcsik, A. (2004). Is there a 'democratic deficit'in world politics? A framework for analysis. *Government and Opposition*, 39(2):336–363.

Neuhold, C. and Strelkow, A. (2012). New opportunity structure for the 'unusual suspects'? Implications of the early warning system for the role of national parliaments with the eu system of governance. *OPAL Online Papers*, 4.

Putnam, R. D. (1988). Diplomacy and domestic politics: the logic of two-level games. *International Organization*, 42(3):427–460.

Quintane, E., Conaldi, G., Tonellato, M., and Lomi, A. (2014). Modeling relational events. a case study on an open source software project. *Organizational Research Methods*, 17(1):23–50.

R Core Team (2014). *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing, Vienna, Austria. http://www.r-project.org (last access: February 18, 2014).

Raunio, T. (2009). National parliaments and European integration: What we know and agenda for future research. *The Journal of Legislative Studies*, 15(4):317–334.

Robins, G. and Alexander, M. (2004). Small worlds among interlocking directors: Network structure and distance in bipartite graphs. *Computational & Mathematical Organization Theory*, 10(1):69–94.

Robins, G., Pattison, P., Kalish, Y., and Lusher, D. (2007a). An introduction to exponential random graph (p*) models for social networks. *Social Networks*, 29(2):173–191.

Robins, G., Snijders, T. A., Wang, P., Handcock, M., and Pattison, P. (2007b). Recent developments in exponential random graph (p*) models for social networks. *Social Networks*, 29(2):192–215.

Sieberer, U. (2011). The institutional power of Western European parliaments: A multidimensional analysis. *West European Politics*, 34(4):731–754.

Slaughter, A.-M. (2004). *A New World Order*. Princeton University Press.

Thomson, R., Boerefijn, J., and Stokman, F. (2004). Actor alignments in European Union decision making. *European Journal of Political Research*, 43(2):237–261.

Tsebelis, G. (2002). *Veto Players: How Political Institutions Work*. Princeton University Press, Princeton.

Volkens, A., Lehmann, P., Merz, N., Regel, S., Werner, A., Lacewell, O. P., and Schultze, H. (2013). The Manifesto data collection. Manifesto Project (MRG/CMP/MARPOR). Berlin: Wissenschaftszentrum Berlin für Sozialforschung (WZB).

Wang, P., Pattison, P., and Robins, G. (2013). Exponential random graph model specifications for bipartite networks – a dependence hierarchy. *Social Networks*, 35(2):211–222.

Warntjen, A. (2012). Measuring salience in EU legislative politics. *European Union Politics*, 13(1):168–182.

Wasserman, S. and Pattison, P. (1996). Logit models and logistic regressions for social networks: I. An introduction to Markov graphs and p*. *Psychometrika*, 61(3):401–425.

Winzen, T. (2012). National parliamentary control of European Union affairs: A cross-national and longitudinal comparison. *West European Politics*, 35(3):657–672.

Winzen, T. (2013). European integration and national parliamentary oversight institutions. *European Union Politics*, 14(2):297–323.

Wlezien, C. (2005). On the salience of political issues: The problem with 'most important problem'. *Electoral Studies*, 24(4):555–579.

Wonka, A. and Rittberger, B. (2014). The ties that bind? Intra-party information exchanges of German MPs in EU multi-level politics. *West European Politics*. Forthcoming.

Zimmer, C., Schneider, G., and Dobbins, M. (2005). The contested Council: Conflict dimensions of an intergovernmental EU institution. *Political Studies*, 53(2):403–422.

Appendix: summary statistics and goodness of fit

Table 2 gives an overview of the distributions and summary statistics of all variables used in the analysis. Furthermore, figures 3 and 4 summarize the distribution of parliamentary activity per country and year, and the distribution of the prominence of proposals per year, respectively. Figure 5 presents the area under the curve for the fitted models and two additional null models as a measure of goodness of fit.

	level	nobs	min	max	mean	median	sd
Edges	tie	25350	0.00	1.00	0.01	0.00	0.11
Enlargement round homophily	tie	25350	0.00	7.00	0.12	0.00	0.50
First chamber homophily	tie	25350	0.00	5.00	0.10	0.00	0.42
Bicameralism homophily	tie	25350	0.00	10.00	0.28	0.00	0.91
Political system homophily	tie	25350	0.00	7.00	0.15	0.00	0.56
Two-chamber system homophily	tie	25350	0.00	8.00	0.20	0.00	0.74
GWDegree (first mode)	tie	25350	0.00	8.00	0.23	0.00	0.77
First chamber	chamber	39	0.00	1.00	0.74	1.00	0.44
Bicameralism	chamber	39	1.00	4.00	2.13	2.00	1.00
(Semi-) presidential	chamber	39	0.00	1.00	0.10	0.00	0.31
Capacity	chamber	39	0.06	1.20	0.38	0.26	0.31
New member state	chamber	39	0.00	1.00	0.44	0.00	0.50
Control	chamber	39	0.33	2.67	1.70	1.83	0.59
EU/EC negative mentions	chamber	39	0.00	1.44	0.26	0.00	0.48
GWDegree (second mode)	tie	25350	0.00	7.00	0.45	0.00	0.86
Binding decision	proposal	650	0.00	1.00	0.50	1.00	0.50
DG Agriculture	proposal	650	0.00	1.00	0.05	0.00	0.22

Table 2: Summary statistics for all variables and relations

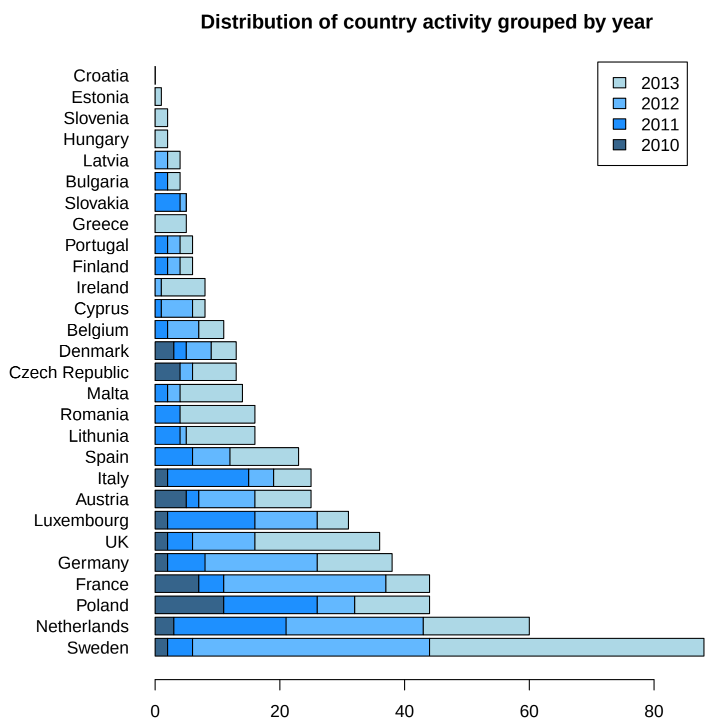


Figure 3: Distribution of parliamentary activity per country and year.

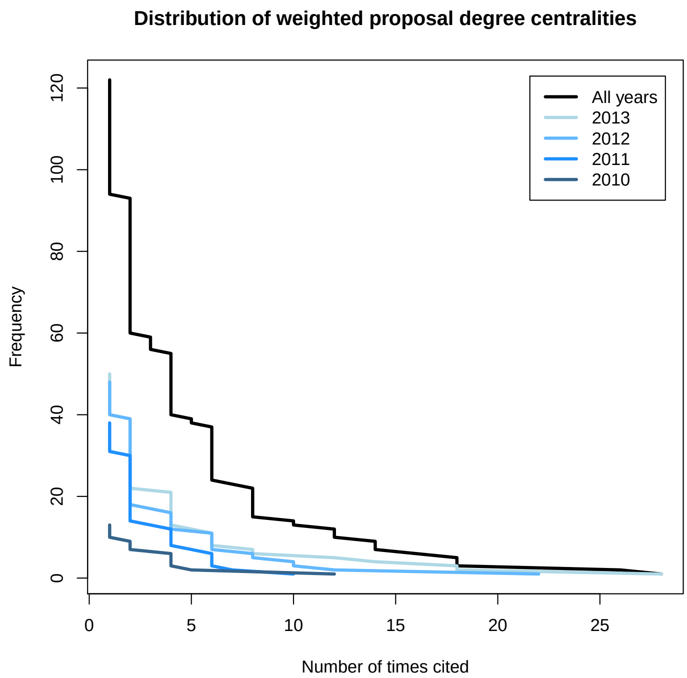


Figure 4: Distribution of the prominence of proposals per year.

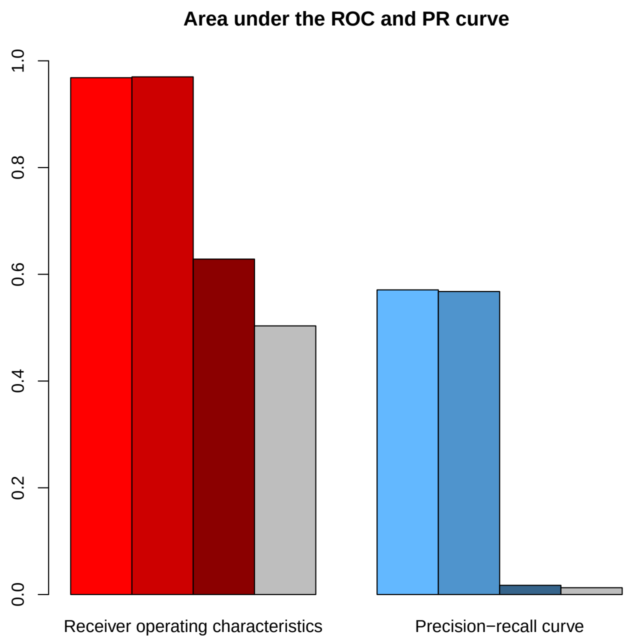


Figure 5: Area under the ROC curve as a measure of goodness of fit. Full model, reduced model, model without any network terms, and random graph (from left to right).