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EU Transgovernmental Networks: The Emergence of a New Political Space beyond the Nation State?

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Abstract

Does the EU represent a new political order which replaces the old nation states? To answer this question we need to identify political key actors and the factors influencing the structure of their interactions. Recently, transgovernmental networks have been considered to be the most important feature of the new world order generally, and of the EU more specifically. Unfortunately, the structure, processes and impact of horizontal interorganizational relations between nation states are unknown. The main objective of this paper is to identify and to explain the selective structure of informal bilateral relations of high officials of the EU member states' ministerial bureaucracies on the occasion of an EU Intergovernmental Conference. Our data rely on standardized interviews with 140 involved top-level bureaucrats. The statistical estimation of network choices is based on recent developments of exponential random graph models.

Emerging New Political Spaces: the Fusion of European Administrations

Does the EU represent a new political order which replaces the old nation states? To answer this question we need to identify the key actors and the factors influencing the structure of their interactions.

The suggestions of the grand theories of EU integration are well known: For the liberal intergovernmentalist approach of Moravcsik (1998), national governments are and continue to be the ‘masters of the treaty’. Therefore he focuses on the making of constitutional rules representing the most fundamental rules of this intergovernmental regime in his view. Inspired by neorealism, he conceives the integration dynamic as mainly driven by geopolitical and economic interests of states with defined territories and boundaries.

Contrary, neofunctionalism accentuates civil society, reorienting its demands and support to supranational actors who are supposed to be better able to manage social change (cf. Haas 1961). In this view, functional needs drive the integration process. Cross-sectional spill overs expand the political competencies of supranational actors and undermine the authority of the nation state. Are these grand theories incommensurable? In their volume ‘The Institutionalization of Europe’, Stone Sweet, Sandholtz, and Fligstein (2001) offer a perspective which has the potential to overcome the differences. They define political spaces as “social spaces wherein actors meet to make, apply, interpret and enforce rules; they are thus sites of collective governance” (Stone Sweet, Sandholtz, and Fligstein 2001, 13). So-called ‘skilled actors’ within the existing political boundaries of governance develop a supranational system. This perspective is open for any type of actors in the making and the application of any type of rules of a political order.

Accordingly, we propose to neglect (for the moment) competing claims with regard to the preponderance of different actors (national governments versus actors below or above the

governmental executive). Rather we propose to specify the respective action arena (constitutional treaty-making versus legislative policy-making and/or implementation) and to focus on one specific type of the involved ‘skilled actors’ in order to identify the specific structure of their interactions. Thereby we contribute partial insights into the emerging order of an intended new political space.

For the following analysis we have chosen a constitutional conference as our research case.¹ But contrary to Moravcsik (1998), we will not focus on formal interstate bargaining, but on the underlying, embedding informal transgovernmental interactions of the national ministerial bureaucracies. According to several theorists of EU integration, government officials are the most important national ‘skilled actors’ during EU intergovernmental conferences (cf. Hayes-Renshaw and Wallace 1997). According to Slaughter, their transgovernmental interactions are considered to constitute the most important process of integration (Slaughter 2004). Regular formal meetings of governments and administrations at the EU level institutionalize manifold forms of mutual participation and facilitate a common perception of policy problems. However, according to Wessels (1997), a complex fusion of national governmental administrations with supranational bureaucracies is under way. He argues that the ongoing transborder bureaucratization has already produced a sort of mixed multi-level administration. Despite considering the intergovernmentalist image at odds with how national policy preferences are formed and represented, Kassim and Peters acknowledge that governments perform better in Brussels the more efficient their domestic co-ordination procedures (cf. Kassim and Peters 2001, 329-339).

¹ For empirical studies on legislative decision making in the EU, cf. Bueno de Mesquita and Stokman 1994, Thomson 2006.

By focusing on the policy-making styles of state officials,² we will provide a completely new perspective on the political order of the EU-15. Making transparent the informal communication networks of EU-15 government officials on the occasion of an intergovernmental conference, we want to highlight a specific aspect of just these domestic coordination procedures. First, we will outline the approach of transgovernmental networks and provide its definitions. Next, we introduce the case. Then we will derive hypotheses with regard to the underlying incentives to form such networks. Next, we describe the main aggregate patterns of the informal relations of high officials of the EU member states' ministerial bureaucracy on the occasion of an EU Intergovernmental Conference. Finally, we explain the individual network choices in order to contribute to the understanding of the potential emergence of a new political space and new authority structures (cf. Stone Sweet, Sandholtz, and Fligstein 2001). More specifically, we investigate whether informal bureaucratic networks have been a challenge to the national governments: Have incentives for 'bypassing' the own government been effective? Our data are based on standardized interviews with 140 top-level bureaucrats in the governments of the EU-15 who have been involved in the preparation of the negotiations preceding the Amsterdam treaty. For the statistical estimation we apply recently developed exponential random graph models based on Markov Chain Monte Carlo maximum likelihood estimations (cf. Snijders 2002, 2005, Robins et al. 2006).

Transgovernmental Networks

According to Slaughter (2004) transgovernmental networks are the most important feature of the new world order. They replace the state formerly conceived as a hierarchical unitary actor. In her view, government officials form horizontal networks in order to prepare and to enforce global

² "State officials develop policy-making styles [...] that are provoked by, and are used to respond to, perceived dysfunctionalities " (Fligstein and Stone 2002, 477)

policies informally. Central governmental authorities loose their function in favor of issue-specific border-crossing networks: “The structural core of a disaggregated world order is a set of horizontal networks among national government officials in their respective issue areas” (Slaughter 2004, 19). These networks are considered to emerge spontaneously, remaining flexible and informal, or they institutionalize as international organizations.

The discussion of transgovernmental relations was mainly initiated by the important contributions of Keohane and Nye (1974), where they provided a meanwhile classic definition:

“We define transgovernmental relations as sets of direct interactions among sub-units of different governments that are not controlled or closely guided by the policies of the cabinets or chief executives of those governments. Thus we take the policies of top leaders as our benchmarks of ,official government policy” (Keohane and Nye 1974, 43)

Rather pragmatically, the authors take the interests of the top leaders as a reference point representing the highest governmental authority. They distinguish two types of transgovernmental relations: As long as transgovernmental relations of governmental officials are fully consistent with the targets and intentions of top leaders, these relations are called ‘transgovernmental coordination’.³ Contrary, where the central executive is weak, and the officials “perceive a greater common interest with another government, or sub-units of another government”, the resulting relations are called ‘transgovernmental coalitions’ (Keohane and Nye

³ “Transgovernmental policy coordination refers to the activity designed to facilitate smooth implementation or adjustment of policy, in the absence of detailed higher policy directives.” (Keohane and Nye 1974, 44) and “The most basic and diffuse form of transgovernmental policy coordination is simply informal communication among working-level officials of different bureaucracies. Such communication does not necessarily contradict the conventional conceptualization of states as coherent coalitions vis-à-vis the outside world [...] It is well-known that international organizations frequently provide suitable contexts for such transgovernmental communication.” (Keohane and Nye 1974, 44-45)

1974, 48).⁴ It may seem surprising that the authors are contrasting transgovernmental coalitions with transgovernmental relations, because the latter are already characterized as “not controlled or closely guided”. However, this simply mirrors the modern conception of bureaucracies, and of delegation in general (Hammond 1986, Hammond and Knott 1996, Lupia 2003). Per definition, every agency relation is characterized by an asymmetry of the distribution of information and the risk of moral hazard, otherwise delegation, specialization, and self-organization would be useless. A transgovernmental coalition à la Keohane/Nye distinguishes itself by the fact that the bureaucratic agent actually works against the own principal. In their comparative analysis of top officials in Western European States, Page and Wright (1997) come to the conclusion that the question of the political control of the bureaucracies has become the most crucial one.

The formal structure of governmental organizations lays down the chain of delegation and the hierarchy of positions. Competencies of decision-making and of control are formally assigned and allocated to positions. But every organization is also built on informal structures of self-organization:

„Informal structures are the coalitions or networks of unofficial relationships which play a continuous role, sometimes positive and sometimes negative, in the transmission of commands, in the collection and communication of information and in the coordination of tasks inside and, at times, beyond the confines of organizations.“ (Breton 1998, 187)

Whereas the existence of informal transgovernmental bureaucratic networks is therefore not new, their extent and the issue areas covered are considered to have reached completely new dimensions in the international sphere. Despite her rather optimistic expectations with regard to

⁴ „For a transgovernmental coalition to take place, a sub-unit of one government must perceive a greater common interest with another government, or sub-units of another government, than with at least one pertinent agency in its own country; and central executive control must be loose enough to permit this perception to be translated into direct contacts with the foreign governments or agencies in question.“ (Keohane and Nye 1974, 48)

the diverse functions and the effectiveness of such networks, Slaughter acknowledges also their potential problems: their lack of accountability due to their informality, the risk of uncontrolled technocracy and the consequences of depoliticisation. Her suggestion for countering these risks is to secure transparency, i.e. to make the networks visible (Slaughter 2004, 235). However, it is exactly this aspect which is completely underresearched in the literature. Unfortunately, quantitative empirical evidence with regard to the structure, processes and impact of horizontal interorganizational networks between nation states' bureaucracies is inexistent. As a consequence, open questions remain how these networks come into being, how they are structured and how they further develop.

The Case: The EU Intergovernmental Conference 1996

The Intergovernmental Conference (IGC) 1996 and the resulting Amsterdam Treaty constituted a discrete step – like Maastricht or Nice – of an institutional reform which contributed to the formal constitutionalization of the European Union. The IGC 1996 took place from April 1996 to June 1997. It had the purpose of completing the Political Union, of (re-)balancing the division of power, and especially of preparing the institutional setting for an EU enlargement. So far, EU constitution-building happens incrementally, i.e. member states consent gradually on voluntarily incomplete contracts. Like national constitutions, intergovernmental treaties contain global goals as well as provisions for institutional arrangements.

However, the public impression of one-shot intergovernmental conference negotiations during summits of heads of states is invalid (cf. Thurner and Pappi 2006). Such negotiations span months of formal meetings and informal coordination between member states. Therefore, an appreciation of negotiation outcomes has to take into account the specific form of the underlying

processes. More specifically we argue that transgovernmental networks of the responsible top officials are an indicator of an already existing enhanced informal cooperation – of at least some of the national ministerial bureaucracies. The possible existence of such subsets of member states exhibiting already a deeper degree of political, i.e. of an administrative integration, is expected to constitute even a more valid measure for the implicit integration of the EU-15 at that time.

Actually, the possibility of allowing subsets of member states to form sub-union(s) on the basis of concrete policies ('Europe à la Carte') or on the basis of more general criteria ('Core Europe', 'Europe of Concentric Circles') was one of the most discussed issues in the negotiations leading to the Amsterdam as well as to the Nice Treaty. And it continues to determine the public and scientific debate. Finally, the Amsterdam Treaty inserted the opportunity for majorities to engage in a closer cooperation of subgroups with the possibility to use the existing institutions and procedures of the EU. The Treaty of Nice even facilitated the procedure by reducing the required number of members to eight and by abolishing the veto right of individual member states. Even the area of the Common Foreign and Security Policy is now open for coalitions prepared to a deeper integration.⁵ It has to be emphasized, that already the provisions of the Amsterdam Treaty demand the openness and transparency of such a closer cooperation.

Hitherto, our knowledge about the embeddedness of negotiations into informal transgovernmental networks of officials in the involved ministries is at least incomplete. In order to identify and characterize the informal bureaucratic interactions, we follow graph-theoretical approaches defining networks simply as relations between nodes. Nodes in our case are involved top officials of the ministerial bureaucracies. They indicate their communication partners in

⁵ For more details on these flexibility provisions, see Title VII of the Treaty of the EU. An overview on the debate provides Stubb (2002).

equivalent departments of the other member states. These relational data allow us to reconstruct the emerging networks from local bilateral transgovernmental communication channels of the involved ministries and the respective responsible officials during the Intergovernmental Conference 1996. In the next section we discuss the micro-incentives to initiate and maintain such informal transgovernmental networks in order to formulate testable hypotheses.

Hypotheses on the Network Formation of the Ministerial Bureaucracy

Why should agents of the ministerial bureaucracies initiate and/or maintain transgovernmental relations before and during ongoing international negotiations? Slaughter argues that transgovernmental networks encourage “multilateral discussion prior to all decisions” and are therefore “likely to produce more creative, more reasoned, and more legitimate solutions to many of the problems that members face” (Slaughter 2004, 208). Fearon (1998) enumerates several reasons to discuss issues before making a collective decision: revealing private information, information aggregation, justification of demands, promoting a consensus, etc. However, these advantages of debate and preplay communication are not unconditional (cf. Austen-Smith 1990a,b, Thurner and Pappi 2006). E.g., revealing private information depends on a perception of common or at least non-opposite interests. Hence, for theoretical reasons it is necessary to identify preconditions for the incentives of informal transgovernmental preplay communication in varying contexts.

In the following we leave it open whether transgovernmental communications efforts are intended to influence the addressees, whether resources like support are offered or demanded. In principle, in every relation there is a flow of information which can be of considerable value. At the same time, initiating and maintaining relations entails opportunity costs: the time budget of politicians and top officials is extremely constrained. Therefore, we assume that informal

bilateral transgovernmental networks are formed on the basis of a cost-benefit analysis: connections are valuable, but their initiation as well as their continuation requires the allocation of resources (for instance attention) that may be more useful for other tasks or relations (cf. Bueno de Mesquita 2003, 85). As a consequence, actors limit their network efforts and we have to expect selective and directed networks. ‘Selective’ means that not every bureaucratic agent entertains relations with all possible opportunities due to opportunity cost considerations. ‘Directed’ means that network efforts originate from one agent and are addressed to another agent in an equivalent ministerial jurisdiction.

We argue, therefore, that the revealed selectivity and directedness of network choices can be interpreted as an indicator for the relative valuation of a link at a certain point in time. The resulting pattern of the networks mirrors a „spatial cost topology“ (Jackson and Wolinsky 1996), i.e. the respective spatial distribution of costs and benefits. ‘Spatial’ differences are not necessarily of a geographic nature – they may represent any social similarities or conflicts. The assumption of a spatial cost topology supposes that the resulting similarity structure indicates the constant attributes of the nodes/actors leading to intensified interactions.

Starting from this general opportunity cost perspective we have now to provide concrete micro-incentives why officials should bear the cost of informal communicative efforts – additional to the already formalized regular meetings in the Council.

Applying the delegation perspective of bureaucracies (Bendor, Glazer, and Hammond 2001) to the Keohane/Nye conjecture on the incentives of building transgovernmental coalitions, i.e. on ‘bypassing’ the own government, we propose to distinguish between the principals (premiers, ministers) and the respective bureaucratic agents (responsible ministerial officials). Accordingly, four situations result from the combination of the following two dimensions: a) the principal is

favorable or she is against the creation of informal networks of self-organization; b) the agent self-organizes transgovernmentally in line with or against the explicit or implicit goals of the principal. The following table summarizes this combination:

(Insert Table 1 here)

This table illustrates again that it is not straightforward from pure detection of an informal communication to derive already the respective underlying incentive of network formation: No informal networking may be in harmony with the principal's explicit and implicit command or it may be simply due to a shirking bureaucracy. Analogously, the principal may be in favor of decentralized informal networking, e.g. in order to screen other governments' bureaucracy, to signal negotiation positions, to signal domestic resolve, or to prearrange coalitions. Or the agent actually hides her networking efforts, e.g. in order to bypass the principal. It should be noted, however, that the bypassing conditions as formulated by Keohane and Nye are sufficient and necessary separating conditions for detecting moral hazard! Formulating their definition of transgovernmental coalition as a hypothesis, we expect officials to bypass their principals under the following conditions:⁶

Hypothesis 1a: Bypassing Incentive

In constellations where the bureaucratic agent perceives a) a conflict to the negotiation positions of its government; and b) the bureaucratic agent of an equivalent ministry of another member state is closer to her position, the probability of transgovernmental coalition formation increases.

⁶ We provide formal operational definitions for all hypotheses in the appendix.

With regard to EU summits of the head of governments, such incentives have been highlighted by Hayes-Renshaw and Wallace (1997) who argue that many ministers as well as officials have a rather ambivalent relation toward these summits. They fear that their sectoral jurisdictional interests are put aside in these highly political meetings.

According to Keohane and Nye (1974) transgovernmental relations are expected to be more frequent in governments with a low degree of hierarchy or, conversely, with a high degree of ministerial discretion:

Hypothesis 1b: Low Hierarchy

Ministries within governments that are characterized by a low hierarchy organization⁷ are expected to exhibit a higher propensity to engage in transgovernmental networks.

Bypassing may be especially strong in such an environment, or even exist only there:

Hypothesis 1c: Bypassing Incentive and Low Hierarchy

The incentive of bypassing the own government proves to be effective more frequently or only in low-hierarchy environments.

The bypassing hypothesis relies on one out of several distinct processes of network choice as identified by the network literature, i.e. on social selection due to attribute similarity or ‘homophily’. The probabilities of selective network choices often depend on ‘types’, i.e. on the

⁷ More concretely, low hierarchy can be thought of as the degree of ministerial autonomy, cf. Laver and Hunt 1992, 125.

attributes of actors and/or their relations. The respective process is called “assortative mixing” (Newman 2004, 191). It mirrors the tendency “to associate preferentially with people who are similar to our selves in some way” (ibd.). In the following we propose additional hypotheses based on ‘assortative mixing’, i.e. with regard to the effect of (dis)similarities of policy preferences, of being a founding member, and of bilateral economic interdependencies.

It is often argued that forming transgovernmental networks with equivalent ministerial jurisdictions in other states is caused or facilitated by similar policy interests. Conceiving policy decision-making as being located in a measurable political space (cf. Enelow and Hinich 1994) we argue that similar locations of the state officials with regard to the negotiation issues of the conference should induce more transgovernmental interactions. E.g., Grofman (1982) accentuates the process of proto-coalition building of actors with similar interests. Analogously, Scharpf (1997) argued that in the process of ‘negative coordination’, small subsets of actors bilaterally engage in avoiding negative externalities. Based on these theoretical considerations, we expect officials with similar policy preferences to form coalitions. Contrary to this hypothesis, and given complete information on political stances and assuming an opportunity cost perspective, one would not expect rational actors bearing the cost of additional communicative efforts directed to officials with similar or even identical preferences. If rather this incentive is effective in transgovernmental network formation, agents should invest more in networks with distant agents – e.g. for motives of screening or influencing other officials:

Hypothesis 2: Political Proximity

The smaller the political distances between the bureaucratic agents of different member states, the higher/lower the propensity of officials to entertain transgovernmental networks.

According to concepts of a 'Core Europe' or a 'Europe of Concentring Circles', i.e. of the idea that only a subset of member states should deepen their political integration (cf. Stubb 2002), one would expect that especially the ministerial bureaucracy of the founding members (Germany-France-BeNeLux-Italy) are engaged in a relatively closer network as compared to agents of late entry states. For the officials of these member states, established long-term relations may have lower transactions costs of transgovernmental coordination. Contrary to this hypothesis, and along the arguments of adherents of the thesis that 'deepening is not in contrast with widening the EU' we should expect, that transgovernmental network formation spreads evenly across all member states:

Hypothesis 3: Informal 'Core Europe'

The ministerial bureaucracy of the founding member states exhibits a higher degree of transgovernmental interactions.

The central goal of EU integration as addressed in the guidelines of the EC (cf. Art. 2 of the TEC) is economic cooperation and a free trade area. According to geopolitical approaches, international economic cooperation follows security concerns and already existing alliances.⁸ Neofunctionalism and liberalism in international relations assumed the causal impact to be reverse: regional integration is driven by economic demands. More recent approaches propose a

⁸ For the context of the EU: cf. Moravcsik 1998, 27-35, 476-478.

more complex causal logic of regional integration. For Mattli (1999, 190 ff), the initial demand for regional integration comes from market actors. However, the political supply side has to show a “willingness [...] to accommodate demands for functional integration”. Fligstein and coauthors (Fligstein and Mara-Drita 1996, Fligstein and Stone Sweet 2002) put forward the view that the dynamics of political and economic integration mutually interact. More importantly, markets and political governance systems are socially embedded and constructed from networks. Regardless of the postulated direction or process of causality, these perspectives lead us to expect those states with higher bilateral economic interdependencies or connectedness to have closer underlying transgovernmental relations. Strong economic interdependencies require a politico-administrative embedding, regardless which of the ministerial jurisdictions are considered. If, contrary, transgovernmental relations reflect rather special jurisdiction-specific interdependencies, we would not expect a generalized relation between transgovernmental networks and economic flows across ministerial jurisdictions:

Hypothesis 4: Bilateral Economic Interdependencies

The higher the bilateral economic interdependency between a member state to another member state the higher, *ceteris paribus*, the propensity of forming transgovernmental ties.

If Fligstein’s idea of the social embedding of markets and politics is valid, we should also observe typical patterns of social interaction. The literature on social networks has a long experience with local incentives of network formation: First, social processes give rise to structural reciprocity and transitivity. The investigation of preferences for reciprocated relations in an observed network implies the question: “How strong is the tendency for one actor to

‘choose’ another, if the second actor chooses the first?” (Wasserman and Faust 1994, 507). Referring to our example, if the bureaucratic agent *a* has been trying to achieve a pre-arrangement with an equivalent ministry *b* in another country, then how likely is it that the bureaucrat *b* has been trying to do the same? Another prominent preference of actors in social relations is to be member of closed and therefore trustful relations. This incentive of social network formation is represented by transitivity structures. In many social networks we observe that if *a* is connected to *b*, and *b* to *c*, then there is an increased probability that *a* will also be connected to *c*. Transitivity is a formalization of the proposition ‘the friend of my friend is my friend’. The existence of such configurations would be an indicator for informal self-organizing teams and even clique-like structures – below highly formalized conferences. Measuring transitivity allows us, therefore, to assess the stability and the degree of the institutionalization of transgovernmental relations.

Alternative social processes of network formation are the asymmetric attraction of ties (popularity) as well as asymmetric efforts of initiating links (expansiveness). Both types lead to core-periphery network structures and indicate the emergence of informal transgovernmental hierarchies. Non-hierarchical structures are reflected by so-called cycling structures, i.e. we observe a tie from *a* to *b*, from *b* to *c*, and from *c* to *a*. Communication flows moving in a circle mirror point to decentralized deliberation. Contrary, acyclic configurations are interpreted as an indicator for hierarchical networks (Nooy, Mrvar, and Batagelj 2005, 213 ff).

Last but not least, there is a market for political brokers of information. These actors invest in bridging ‘structural holes’ (Burt 1992) and to serve as mediators. There are two possible consequences. Either, these bridges institutionalize as social positions without leading to higher

direct interactions, or the probability of a direct connection between two officials increases, if there is at least one indirect relation between them.

Whether these local processes of reciprocity, transitivity, asymmetric popularity and expansiveness, deliberation, and indirect relations are present in transgovernmental networks has never been assessed empirically. In the next section we provide formal definitions and assumptions in order to make intersubjectively transparent the operational prescriptions for the set up of the empirical model.

Definitions and Assumptions

We consider the set N consisting of the 15 EU national 'governments' ($i=1,\dots,15$). Each government is regarded as a system with specific chains of delegations (cf. Strøm, Müller, and Bergman 2003) and a policy-specific assignment of competencies to partial ministerial jurisdictions. The government can therefore be disaggregated into a team with varying numbers of involved actors ($j=1,\dots,9$). We call them for brevity premiers and ministers. Denote a_{ij} as a bureaucratic agent in the premier's office or in a particular jurisdiction j of member state i . Both, premiers and ministers delegate specific tasks to bureaucratic agents. Each of the involved agents is endowed with varying formal policy-specific decision-making competencies. However, this simplified formal structure may be embedded into informal, potentially deviating, authority systems due to or based on informal interaction patterns (cf. Blau 1955).

Let Φ be the set of jurisdiction-specific transgovernmental networks with $\Phi = \{PO, MFA, MI, MJ, MF, MEco, MLab, MSoc, MEnv\}$ ⁹. Thus, we conceive transgovernmental relations as

⁹ Premiers Offices = PO; Ministries of Foreign Affairs = MFA; Ministries of the Interior = MI; Ministries of Justice = MJ; Ministries of Finance = MF; Ministries of Economy = MEco; Ministries of Labour = MLab; Ministries of Social Affairs = MSoc; Ministries of the Environment = MEnv.

consisting of multivariate relations between different equivalent actors in each government of the member states.

The assumption of directed relations requires a differentiation between relations of agent a to agent b and b to agent a . For a relation of agents $a \rightarrow b$ we consider a as the initiator of a communication/coordination effort whereas b is considered as the addressee. Therefore, every network consists of a set of ordered pairs indicating whether they have relations one with another. Each of the jurisdiction-specific networks can be represented by $g \times g$ sociomatrices \mathbf{X}_{PO} , \mathbf{X}_{MFA} , ... \mathbf{X}_{MEnv} , where g is the number of involved actors in that network. In case of the occurrence of a directed relation between agent a and agent b , the cell entry $X_{a,b}$ takes a value of 1, 0 otherwise.

Each involved bureaucratic agent a_{ij} has a location z_{ij} in the multidimensional political space Z with supposed separable dimensions. A subspace of this overall political space consists of the set M of negotiation issues ($m=1, \dots, 46$), over which the governments try to reach an international agreement in the intergovernmental conference. Each issue can be mapped to the unit interval. The bargaining position of a government in an issue is called its national bargaining position (NBP). Bureaucratic agents are assumed to optimize an objective function (cf. Snijders et al. 2005, 38) with respect to a local network configuration when forming transgovernmental ties. Analogously to random utility models where non-deterministic discrete choices are assumed due to uncertainty, random graph models may capture the agents' uncertainty when choosing network partners: Uncertainty about the attributes of the alteri and their organizational environment, about the quality of a bilateral relation, and about the structure of the overall network. Alternatively, random graph models may reflect a lack of information on the part of the observing scientist, i.e. they include measurement error (cf. McFadden 1974, Manski 1977). Let

us therefore assume that bureaucratic agents are not completely certain about the exact location of the alteri in the political space. However, each official is supposed to have the same subjective expectations. In the following it will be argued that these expectations are represented by probabilistic choice functions.

Exponential Random Graph Models: A New Method for the Explanation of Network Choices

The main objective of this study is a statistical analysis of each of the different transgovernmental networks of the bureaucratic agents of the premiers' offices and the ministerial jurisdictions. However, additionally to a deterministic description of aggregate network patterns we want to test whether the observed network choices are purely random or whether their selectivity exhibit regularities which reflect the hypothesized incentives and processes. As it is well known from the extensive literature on social networks, real-world networks are far from being completely random. E.g., there are interdependencies due to reciprocal attraction, transitive closures etc. These complex patterns of interdependencies between the units of observation make statistical estimation a nontrivial task.

Random graph models try to capture these interdependencies by constructing so-called dependence graphs where the presence and relevance of specific local configurations are hypothesized.¹⁰ According to the Hammersley-Clifford theorem (Besag 1974) each hypothesis on the presence of specific dependencies in an observed network requires a particular specification of sufficient statistics with respective probability distribution. The most simple, but also completely unrealistic model is the assumption of the independence of all ties (Bernoulli

¹⁰ For recent overviews on random graph models, cf. Robins et al. 2006, Wasserman and Robins 2005, Snijders 2002, Snijders et al. 2005.

Graph). This implies uniform probabilities for all edges of a given network. A more complex model states dyadic independent tie formation. In this so-called p_1 models, the sufficient structural parameters control for the number of ties and the number of mutual ties. Newer approaches, the so-called Markov random graphs or p^* models construct even more complex dependence graphs. p^* models assume that network ties are conditionally dependent as soon as common actors are shared – thereby taking into account also triadic and even higher order configurations.

The functional form of these models is as follows: Suppose our $g \times g$ sociomatrices \mathbf{X}_{PO} , \mathbf{X}_{MFA} , ... \mathbf{X}_{MEnv} to be random matrices with diagonal elements to be 0. $X_{a,b}$ indicates whether there is a tie from a to b . Assuming a type 1 extreme value distribution for the stochastic component and a given vector of sufficient statistics $y(x)$ of a behavioral model, the following exponential probability function results (cf. Wasserman and Robins 2005, 152-153):

$$\Pr(X = x) = \frac{\exp\{\theta'y(x)\}}{\kappa(\theta)},$$

where θ represents a vector of model parameters, and $\kappa(\theta)$ is a normalizing constant guaranteeing that estimated probabilities sum up to one. The estimated coefficients can be interpreted like in standard conditional logit regression models, i.e. the change in a network statistic, in a actor or in a dyadic covariate, has to be referred to the change of the log odds of observing a tie or not. The estimated parameters reflect the relative values of the incentives incorporated in our hypotheses on (dis-)similarities of the actors, on the quality of their relations (dyadic covariates), as well as on the discussed network processes on reciprocity, transitivity, attractions etc.

Applying standard maximum likelihood techniques is now considered as being inappropriate for statistical testing. Therefore we rely on a new estimation technique as proposed and implemented

by Snijders in the program SIENA. Snijders uses a Monte Carlo Markov Chain maximum likelihood estimation technique based on Metropolis-Hastings Sampling (cf. Snijders 2002, Snijders et al. 2005).

Data and Descriptive Results

In the standardized interviews with 140 bureaucratic agents involved¹¹ in the preparation of the IGC 1996 the following free format question was asked:

“Sometimes, it proves to be useful for a ministry – before taking the final national official position – to come to an agreement with an equivalent ministry of another Member State. (Interviewer: Please show list F¹²). Could you indicate the Member States where you have practiced such an agreement building?

This network generator is neutral with regard to the analytical distinction between transgovernmental coordination and transgovernmental coalition-building as put forward by Keohane and Nye (1974). It does not carry meanings like e.g. influencing others or demanding information etc. We only investigate a communicative effort for “distilling and disseminating credible information” (Slaughter 2004, 178).

For illustrative reasons we present the emerging transgovernmental network of the officials of the ministries of environment (Figure 1). The visualization is based of the concept of eigenvector centrality¹³. Eigenvector-centrality operationalizes a concept of centrality which is constructed not only by simply counting the number of received choices (indegrees) of an actor but by taking into account the number of received choices of the choosers. Therefore, this measure accounts

¹¹ I.e. they have written proposals for the coordination unit. These persons have been indicated by the delegation leaders in a first wave of data collection. For more details on data collection, cf. Thurner, Pappi, and Stoiber 2002

¹² List F showed the EU-15 member states in an alphabetical order.

¹³ Cf. Bonacich (1972).

also for indirect ties, and the importance of the choosers. The most central bureaucratic agents, the officials of Germany and Sweden are located in the middle of the circle.

(Insert Figure 1 here)

All other agents are depicted according to their decreasing values on concentric circles around the center. Agents beyond the outer dashed circle have a value of zero. They have not been involved in the domestic process, or they have not been actively participating in the transgovernmental network. The directedness of choices is represented by arrows. A unilateral offering of or demand for a relation is represented by a single arrow. Non-directed edges indicate symmetrical transgovernmental relations. Circles representing the respective member state are used as long as the number of indegrees and targeted agents (outdegrees) are identical. Ellipses inform about the asymmetry between indegrees and outdegrees. The more indegrees as compared to outdegrees, the flatter is the ellipse of an actor in vertical direction (e.g. Denmark, DK), the more outdegrees as compared to indegrees, the flatter is the ellipse of an actor in horizontal direction (e.g. Austria, AUT). The size of the ellipse/circle grows with the overall number of relations.

Figure 1 shows that only the officials of the ministries of the environment of the Scandinavian Countries, Austria, the Netherlands, Germany and Great Britain were engaged in transgovernmental networking. The outstanding feature of this network is its near complete reciprocatedness.

In table 1 we present several standard network descriptives for those networks large enough to be treated statistically. Other ministries like the ministries of defense or agriculture have not, or only sporadically been involved in the preparation of the intergovernmental conference.

For a complete network with bureaucratic agents from all 15 member states there are

$$\binom{N}{2} = (N^2 - N) / 2 = (15^2 - 15) / 2 = 105 \text{ possible unordered pairs and } 210 \text{ ordered pairs.}$$

Comparing the densities of not involved ministries, already corrected for missing nodes, it is possible to get an impression of the relative network activity of the officials of ministries. As to be expected, the highest activity is reported by the officials of the Ministries of Foreign Affairs. Traditionally, they have the formal monopoly of the external representation of the nation state. As a rule, they managed the coordination units responsible for preparing the negotiation positions (cf. Thurner, Pappi, and Stoiber 2002). We point out the relatively high network activity of the officials of the Ministries of Justice and of the Ministries of the Environment showing by far the highest degrees of network activity. As the officials of the Ministries of Justice are concerned, their expertise on European Law is highly appreciated during such conferences. They have to assess the compatibility of negotiation positions with the existing European and national laws and are therefore expected to communicate with the legal experts of other member state. The officials of the Ministries of the Environment not only stand out as especially communicative, but the configuration of this transgovernmental network is, as already shown in figure 1, extremely reciprocal. Obviously, these officials had a preference for reciprocating relations. Contrary, the network of the officials of the Ministries of Foreign Affairs is highly asymmetric. This may indicate the existence of informal authorities or at least dependencies. The relatively low density of the network of the officials of the Premiers' Offices

reflects the usually applied feedback control, leaving transgovernmental precoordination efforts to the officials of the partial jurisdictions.

According to the network densities, all networks under investigation have been highly selective and therefore we conclude already at this stage that the officials followed a cost-benefit analysis when establishing and maintaining informal relations with equivalent ministries in other EU Member States. We highlight again the asymmetric nature of the dyads, i.e. we distinguish between addressing and being addressed. Asymmetric dyads are often conceived of as “intermediate states of relationships that are striving for a more stable equilibrium of reciprocity, or complete nullity (devoid of either arc)” (Wassermann and Faust 1994, 510-11). Further interpretations argue that asymmetric dyads reveal an unequal distribution of resources.

Another important attribute of (sub-) graphs is the degree of transitivity given the distribution of triads and triplets. Triads consist of relations connecting triplets (three actors) and are therefore structurally embedding dyads. Transitive relations constitute a social equilibrium state allowing for reciprocal exchange and its control. They secure the control of compliance and policy implementation. Again, the network of the officials of the Ministries of Environment stands out as being especially transitive.

(Insert here Table 2)

Do these descriptive measures indicate a significant deviation from pure randomness given the overall network configuration? And is the selectivity of these network choices driven by the hypothesized incentives? This will be tested with the following statistical analysis.

Test of Hypotheses

Table 3 shows the estimated parameters for each of the discussed effects. We begin the discussion with the block of structural parameters. Most of the relations under investigation are characterized by non-random reciprocity and transitivity effects. This indicates that reciprocated ties and network closure have been valued positively. Officials have been more inclined to communicate transgovernmentally with another official if such a relation was reciprocated and if there have been also indirect ties connecting them. Both results already corroborate the thesis of an institutionalization of transborder interactions of national bureaucracies. Remember, however, that this process of institutionalization is obviously very selective. Non-random reciprocal and transitivity effects are simultaneously absent in the transgovernmental network of the officials of the Ministries of Economics. The networks of the officials of the Ministries of Labor and the Ministries of the Environment exhibit no additional preference for transitive closure whereas the network of the officials of the Ministries of Foreign Affairs network is characterized by a lack of reciprocated relations. However, this network is characterized by a relevant tendency towards transitive structures.

(Insert Table 3 here)

The network of the ministries of the Environment is remarkable insofar as the highly reciprocal nature of the relations absorbs all other effects. Additionally including our hypothesized micro-incentives based on actor attributes or on dyadic attributes does not lead to improve the models in a way which is required statistically (cf. Snijders et al. 2005, 24). Therefore we present only the reduced form model. Interestingly, the negative effects of ‘three-cycles’ in the networks of

the Premiers Offices, of the Ministries of the Interior, of the Ministries of Finance, and of the Ministries of Social Affairs point to a statistically significantly low occurrence of this configuration. We conclude that in four out of nine transgovernmental networks we observe tendencies towards informal hierarchies whereas deliberative tendencies have been completely absent.

The second block of estimation results contains our hypotheses on micro-incentives which relate to actor attributes or dyadic attributes. Contrary to the expectation that issue proximity, i.e. the similarity of policy preferences, furthers informal transgovernmental relations, this hypothesis is clearly refuted. In the case of the networks of the officials of the Ministries of Foreign Affairs, and of Labor Affairs, the functional relationship is even the reverse: The larger the policy distances between the respective ministries the higher the chance that they entertain relations. We interpret this as a corroboration of the expectation that transgovernmental efforts have been made to screen and to influence colleagues of other member states with distant policy stances whereas the costs of entertaining relations with already close ‘policy neighbors’ were not incurred by rational agents.

One of the most astonishing results can be learnt from the coefficients on bilateral trade interdependencies. For the first time, results from a complex relational analysis show that informal transgovernmental interactions have an economic background: the higher the relative export shares from member state A to member state B, the higher the probability of a transgovernmental relation, regardless which jurisdictional network is considered.

Finally, Keohane and Nye’s bypassing conjecture is refuted for all the networks: Neither the main effects of the existence of the simple bypassing incentive and strong ministerial autonomy, nor their interaction effect are statistically significantly. Governments characterized by a low-

hierarchy do not trigger more transgovernmental relations nor do they increase the impact of the bypassing incentive. There is one exception: officials of the Premiers' Offices have a significantly reduced tendency to form transgovernmental network in governments where the ministries have a high autonomy. This is plausible insofar, as we expect that self-organization in such contexts is exclusively done by specialized ministries endowed with high discretionary decision-making competencies.

What could be the reason for this quasi non-existence of moral hazard in EU transgovernmental networks? Do we observe political control over the national bureaucracies? (cf. Page and Wright 1999) At first glance, it seems that the national governmental executives effectively exercised command and control, that they even mastered the political control of transgovernmental messages. Probing deeper into necessary conditions (cf. Braumoeller and Goertz 2003) of the Keohane/Nye conjecture, we formulated two further expectations: in order to be effective the bypassing incentive a) must be simultaneously present for both agents ('mutual bypassing incentive'); b) occurs only in trustful bilateral situations. The latter condition has been operationalized as an interaction effect of the bypassing incentive and the situation of a reciprocated relation. Testing these additional hypotheses we get the result, that a 'mutual bypassing incentive' does not explain the occurrence of transgovernmental relations. Bypassing in our transgovernmental networks is only effective conditional on the existence of a reciprocal communication situation, namely in the case of the networks of the Ministries of the Interior, Ministries of Finance, Ministries of Economy and Ministries of Social Affairs. Here the interaction effect of bypassing and reciprocity proves to be statistically significant.¹⁴ We interpret this as an indication that the risk of bypassing is taken only in mutually trustful relations.

¹⁴ Estimation of these additional models can be sent on request.

Conclusion

For the first time we have reconstructed the informal transgovernmental organization of an important EU intergovernmental conference. We would like to emphasize that it is already difficult to trace out such behavior in private organizations and at lower levels of public and private organizations. The existence of transgovernmental relations has been acknowledged in the scientific literature since decades. The nature of the emerging overall structure – often beyond individual and bilateral will and perception – and its selectivity were unknown so far. Our objective in this article was explanatory: We wanted to contribute to the question of ‘why’ informal transgovernmental communities are formed. The data may be temporary snapshots, but we rely on multiple observations. All observed networks exhibit rather similar patterns. Therefore, we consider this approach as suitable and valid to reveal processes potentially leading to an emerging new political space – in Europe as well as in other contexts of regional integration. Focusing on the transgovernmental nerves of governance it is possible to identify specific patterns of community formation below the processes of formal intergovernmental conferences.

The main results of our statistical analyses are: Bureaucratic agents carry out a cost-benefit analysis when entertaining transgovernmental networks: These networks are highly selective and they exhibit low densities. Given the statistically significant effects of reciprocity, transitivity, and acyclical relations, there are strong indications of a high degree of institutionalization of the interaction and of the existence of mutual trust. Third, the existence of acyclical relations corroborates the expectation of the emergence of informal administrative hierarchies. Structures of deliberation are absent. Together, the existence of these structural effects corroborates the

hypothesis that politics and markets are socially constructed and embedded (cf. Fligstein and Stone Sweet 2002).

Fourth, the time and again repeated conjecture that preferential similarity induces and facilitates transgovernmental coordination is clearly refuted by our data. Fifth, bilateral economic interdependencies are related to the formation of transgovernmental relations, regardless of the type of ministry considered, i.e. regional political integration and economic exchange patterns mutually interact. Our research design and our results are in line with a research agenda suggested recently by Fligstein: “The expectation is that one will observe global governance where markets exist and a push for new governance, where markets openings have occurred” (Fligstein 2005, 195). This hypothesis has never been investigated the way we propose it in this article. Therefore, we postulate that the old question, whether economic exchange follows geopolitical interests, or vice versa, has to be considered anew, i.e. with empirical evidence that is actually based on relational data. Simple dyadic relationships have to be overcome because they do not capture complex interdependencies.

Last but not least, we put forward a measurement for the effectiveness of state boundaries amidst processes of regional integration. The proposed bypassing incentive seems to have been at work – but only in several actor network (networks of the Ministries of the Interior, Ministries of Finance, Ministries of Economy and Ministries of Social Affairs) and conditional only on mutually confirmed relations, i.e. in order to bear the risk of bypassing, agents have to consider the relationship as stable and trustworthy. We emphasize that we not only put forward an operational hypothesis of the Keohane/Nye conjecture but we offered also a theoretical extension insofar as we proposed and corroborated an alternative necessary condition for the effectiveness of this behavioral mechanism. We conclude that moral hazard is existent and exploited in

transgovernmental relations, but the breakup of nations by transgovernmental relations is far from being complete.

Despite acknowledging the transient character of the observed transgovernmental structure of European regional integration we claim that we have been able to derive insights of a wider spatial-temporal process as soon as we become aware of the fact that such processes exhibit an enormous inertia, at least as the institutionalized network parts are concerned. Naturally, this is not the end of the story, because „the incorporation of formal and of vertical and horizontal informal structures in a single general theory remains, notwithstanding the progress of recent years, an unmet challenge.“ (Breton 1998, 187). Future analyses have to show how these networks interact with supranational structures and how they evolve.

Appendix: Operationalization of Hypotheses

$$\text{Low Hierarchy}_A = \begin{cases} 1 & \text{if member state A has a high degree of ministerial autonomy} \\ 0 & \text{if member state A has a low degree of ministerial autonomy} \end{cases} \quad 15$$

$$\text{Informal Core Europe}_A = \begin{cases} 1 & \text{if member state A is a founding member of the EU} \\ 0 & \text{otherwise} \end{cases}$$

$$\text{Export}^{16} \quad \text{Export}_{A,B} = \frac{\text{Export from member state A to B}}{\sum_B \text{Export von A}}$$

$$\text{Political Proximity} \quad \text{Proximity}_{a,b} = \frac{\sum_{iid=1}^{46} \|Position_a - Position_b\|}{\sum_{iid=1}^{46} VD}$$

$$\text{where} \quad VD = \begin{cases} 1 & \text{if Position}_a \text{ and Position}_b \text{ are not missing} \\ 0 & \text{otherwise} \end{cases}$$

$$\text{Bypassing} \quad \text{Bypassing}_{a,b} = \frac{\sum_{iid=1}^{46} BY_{a,b}}{\sum_{iid=1}^{46} VT}$$

$$\text{where} \quad BY_{a,b} = \begin{cases} 1 & \|Position_a - Position_b\| < \|Position_a - NBP_a\| \\ 0 & \text{otherwise} \end{cases}$$

NBP is the publicly declared bargaining position of member state a

$$VT = \begin{cases} 1 & \text{if Position}_a, \text{Position}_b \text{ and NBP}_a \text{ are not missing} \\ 0 & \text{otherwise} \end{cases}$$

¹⁵ Cf. Laver and Hunt 1992, 125. ‘High autonomy’ is assumed to take values of 1-5 of their index.

¹⁶ Data are available on <http://unstats.un.org/unsd/comtrade/>.

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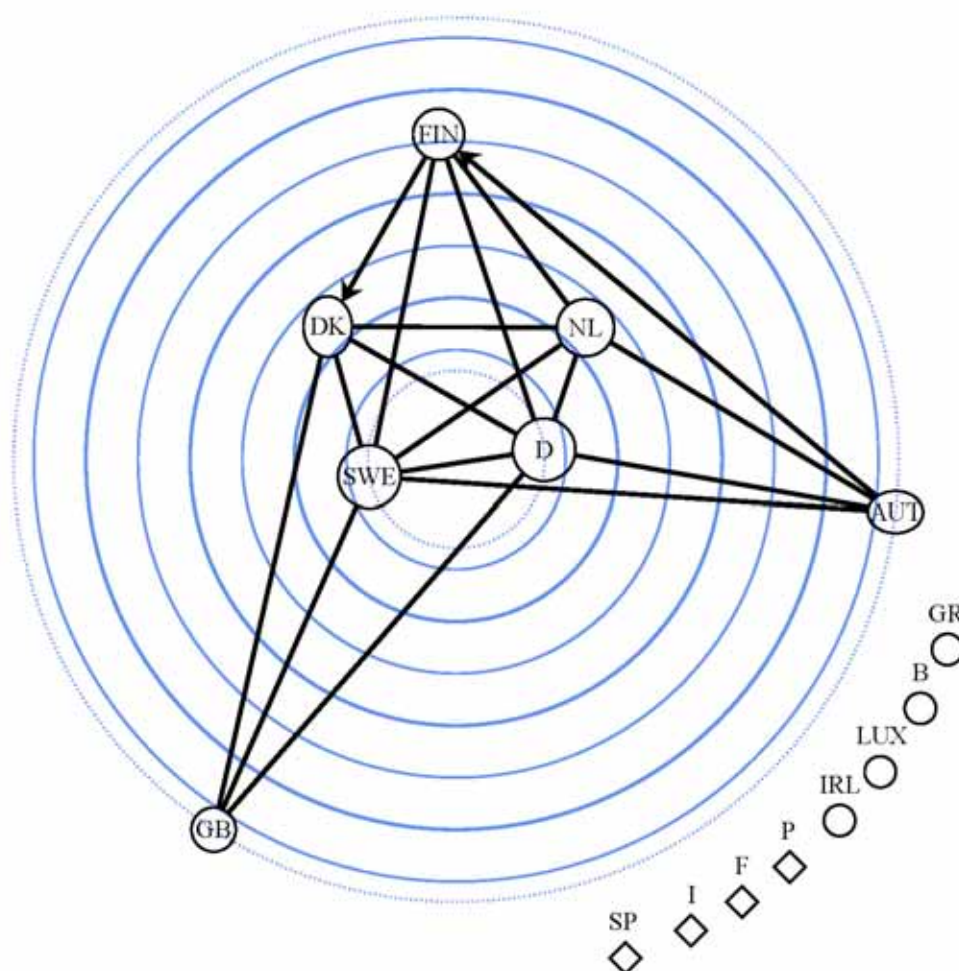
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Figure 1: Informal Transgovernmental Communication Channels: Environmental Ministries (EU-15)



- Not involved in the domestic preparation (i.e.: not interviewed)
- O Not participating in the network

Table 1: Formal Authority and Transgovernmental Networking

	Agent is in line	Agent is not in line
Principal is against informal network formation	No Networking	Networking (Hidden Action, Transgovernmental Coalitions = Bypassing)
Principal is in favor of informal network formation	Networking (Transgovernmental Coordination, Screening and Signaling Efforts)	No Networking (Shirking)

Table 2: Synopsis of relevant network descriptives¹⁷

	PO	MFA	MI	MJ	MF	MEco	MLab	MSoc	MEnv
N of involved actors	13	15	11	14	14	13	12	11	11
Maximum N of directed ties	156	210	110	182	182	156	132	110	110
N of observed ties	29	55	29	44	35	31	31	24	32
Density	0.186	0.262	0.188	0.224	0.179	0.170	0.185	0.156	0.208
<hr/>									
N of possible dyads	78	105	55	91	91	78	66	55	55
Mutual (M)	8	8	7	6	11	7	8	5	15
Asymmetric (A)	10	39	10	30	11	15	11	11	2
Null (N)	70	58	38	55	69	56	47	39	38
Index of reciprocity	0.615	0.291	0.583	0.286	0.667	0.483	0.593	0.476	0.938
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Maximum N of triads	286	455	165	364	364	286	220	165	165
N of observed triads	81	181	76	107	123	93	90	64	154
N of transitive triads	36	84	23	54	40	33	36	21	96
Index of transitivity	0.444	0.464	0.303	0.505	0.325	0.355	0.400	0.328	0.623

¹⁷ Calculated with StOCNET. (Boer et al. 2006, Snijders et al. 2005)

Table 3: ERGM: Sufficient Statistics and Dyadic Covariates

	PO	MFA	MI	MJ	MF	Meco	MLab	Msoc	Menv
Reciprocity	4,209 *	0,098	3,495 *	1,123	4,044 *	1,477	1,815 *	2,748 *	6,322 *
	<i>(1,303)</i>	<i>(0,707)</i>	<i>(1,168)</i>	<i>(0,815)</i>	<i>(0,946)</i>	<i>(0,857)</i>	<i>(0,901)</i>	<i>(1,210)</i>	<i>(2,185)</i>
Expansiveness (out-2-stars)	0,569 *	-0,051	0,251	0,114	0,099	0,350 *	0,124	0,030	-2,174
	<i>(0,160)</i>	<i>(0,140)</i>	<i>(0,308)</i>	<i>(0,115)</i>	<i>(0,219)</i>	<i>(0,161)</i>	<i>(0,293)</i>	<i>(0,251)</i>	<i>(1,617)</i>
Popularity (in-2-stars)	0,070	-0,116	0,187	-0,205	-0,224	0,122	-0,229	-0,830	-1,973
	<i>(0,348)</i>	<i>(0,143)</i>	<i>(0,261)</i>	<i>(0,190)</i>	<i>(0,309)</i>	<i>(0,255)</i>	<i>(0,367)</i>	<i>(0,542)</i>	<i>(1,441)</i>
Indirect Relations (2-paths)	-0,074	-0,147	-0,003	-0,319 *	0,189	0,017	0,042	0,588	2,486
	<i>(0,251)</i>	<i>(0,136)</i>	<i>(0,250)</i>	<i>(0,147)</i>	<i>(0,240)</i>	<i>(0,172)</i>	<i>(0,295)</i>	<i>(0,340)</i>	<i>(1,566)</i>
Transitivity	0,616 *	0,533 *	0,616 *	0,645 *	0,753 *	0,256	0,417	0,944 *	0,924
	<i>(0,201)</i>	<i>(0,149)</i>	<i>(0,259)</i>	<i>(0,181)</i>	<i>(0,187)</i>	<i>(0,246)</i>	<i>(0,324)</i>	<i>(0,312)</i>	<i>(0,855)</i>
Deliberation (3-cycles)	-1,533 *	-0,527	-2,098 *	-0,493	-1,988 *	-0,143	0,066	-2,796 *	-2,223
	<i>(0,682)</i>	<i>(0,418)</i>	<i>(0,888)</i>	<i>(0,534)</i>	<i>(0,667)</i>	<i>(0,687)</i>	<i>(0,909)</i>	<i>(1,133)</i>	<i>(2,587)</i>
Bypassing Incentive	0,001	-0,028	-0,004	0,002	-0,008	-0,018	-0,001	-0,116	
	<i>(0,042)</i>	<i>(0,017)</i>	<i>(0,016)</i>	<i>(0,013)</i>	<i>(0,017)</i>	<i>(0,026)</i>	<i>(0,026)</i>	<i>(0,133)</i>	
Low Hierarchy	-1,432 *	-0,056	0,938	0,431	0,205	-0,054	0,473	0,354	
	<i>(0,700)</i>	<i>(0,372)</i>	<i>(0,513)</i>	<i>(0,383)</i>	<i>(0,410)</i>	<i>(0,431)</i>	<i>(0,420)</i>	<i>(0,719)</i>	
Bypassing Incentive x Low Hierarchy	-0,034	-0,010	0,009	-0,005	0,011	0,021	-0,006	0,102	
	<i>(0,031)</i>	<i>(0,011)</i>	<i>(0,017)</i>	<i>(0,011)</i>	<i>(0,017)</i>	<i>(0,027)</i>	<i>(0,024)</i>	<i>(0,132)</i>	
Issue Proximity	-0,030	-0,078 *	0,002	-0,016	0,003	-0,021	-0,032 *	-0,028	
	<i>(0,033)</i>	<i>(0,026)</i>	<i>(0,021)</i>	<i>(0,012)</i>	<i>(0,014)</i>	<i>(0,014)</i>	<i>(0,014)</i>	<i>(0,016)</i>	
Informal 'Core Europe'	1,124	0,274	-0,079	-0,222	0,334	0,243	0,893 *	0,425	
	<i>(0,691)</i>	<i>(0,367)</i>	<i>(0,520)</i>	<i>(0,409)</i>	<i>(0,356)</i>	<i>(0,433)</i>	<i>(0,437)</i>	<i>(0,531)</i>	
Bilateral Economic Interdependencies	0,117 *	0,066 *	0,089 *	0,089 *	0,060 *	0,055 *	0,134 *	0,121 *	
	<i>(0,038)</i>	<i>(0,024)</i>	<i>(0,040)</i>	<i>(0,030)</i>	<i>(0,026)</i>	<i>(0,026)</i>	<i>(0,041)</i>	<i>(0,047)</i>	

Standard errors are printed below coefficients in *italics*.