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THE POLITICAL NETWORK IN UKRAINE: THE EFFECT OF COMMON PAST ON POLICY MAKING

The process of policy making in Ukraine requires both not only single, but also joint efforts and initiatives of various actors. The great potential for network analysis lies in compiling connections of the governing elite members (executive and legislative branches) created through the co-authorship of the draft laws. It is still a question why some agents of the policy-making process act together while others prefer to remain single-players. This paper suggests a possible explanation analyzing to what extent common biographical experiences of the MPs or ministers overlap with their work on policy documents together. The empirical base for this paper includes two dimensions of interconnections between Ukrainian political elite members who were in power during 2007–2010: one layer of complete network is affiliations through joint legislative initiatives; the other one contains biographical ties of the elite members in various life spheres (business, non-profit and other activities). A range of network measures are calculated to analyze and compare the two networks.

Keywords: *network interaction, public policy formation, political elites, Ukraine.*

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ПОЛИТИЧЕСКИЕ СЕТИ В УКРАИНЕ: ЭФФЕКТ ОБЩЕГО ПРОШЛОГО В ПРОЦЕССЕ ФОРМИРОВАНИЯ ПОЛИТИКИ

Процесс формирования политики в Украине предполагает личные или совместные инициативы различных акторов. Для сетевого анализа большой потенциал заключается в исследовании связей между представителями элит в органах власти (законодательной и исполнительной), сформированных благодаря соавторству проектов законов. Другими словами, открытым в исследовании формирования политики остается вопрос: почему одни акторы предпочитают единоличное авторство, в то время как другие сотрудничают друг с другом. Статья предлагает возможное

объяснение того, как формируются законодательные инициативы и пересекается ли схожесть биографий парламентариев и министров с их готовностью сотрудничать в процессе разработки законопроектов. Эмпирической основой служат два типа связей между представителями украинской политической элиты, которые были у власти в 2007–2010 гг. Одним измерением сети являются аффилиации через совместные законодательные инициативы, другим измерением — связи на основе биографий представителей элиты, с точки зрения различных аспектов деятельности. Проанализированы базовые сетевые показатели, связанные подгруппы, наряду с тестированием гипотез.

Ключевые слова: сетевое взаимодействие, формирование политики, политические элиты, Украина.

Introduction

As some scholars indicate, events that occurred in Ukraine in the Autumn of 2004 (lately named “the Orange Revolution”) emerged — to a certain extent — from an elite conflict; they were caused by the protracted and complicated elite negotiations after a period of sharp conflict over the authoritarian rule of Leonid Kuchma (Kudelia 2007; D’Anieri 2007; Flikke 2008).

Later internal circulation between executive and legislative branches lasted for years. We could observe the turnover in the Ukrainian Parliament elected in March 2006, and again in pre-term elections in Autumn 2007; a few months after the elections, in December, several Members of Parliament (MPs) left their seats due to appointment to the Cabinet of Ministers. During the period between December 2007 and November 2008 the Verkhovna Rada was led by a representative of opposition parties and blocks — Arsenii Yatseniuk who was the Speaker, while representatives of the majority — *Party of Regions* and their supporters — were deputy chairmen. In December 2008 parliamentarians elected the new chairman — Volodymyr Lytvyn from the governmental wing of the Parliament, while the opposition leader Arsenii Yatseniuk left this position becoming an ordinary MP.

However, the new MPs who came instead in December 2007 and later, were already embedded into the network of biographical ties. It is important to evaluate to what extent the elite members are interconnected and how it influences their further collaboration in policy-making — in order to foresee the groups in power that can consolidate their efforts during and after the conflicts and negotiations. Besides, tracing the network ties among elite members we can assess the overall cohesion of the elite as a precondition for it to develop consensus and to provide effective governance without severe confrontation. Thus, in this paper, the network of joint initiatives and the biographical network of members of the political elite will be in the focus of analysis in order to study how former biographical ties influence further policy-making affiliations. In order to do that, the structures in which top-legislators and executives are connected will be identified and the cohesion and centralization of the political elite group will be explored.

Hypotheses and Research Design

Cohesion of elite members has been analyzed with different methods, starting with explorations of the business community and linkages between companies and corporations (Mintz, Schwartz 1985). The approach is based on tracing common affiliations of the companies' board members called "interlocking directorates" to map the network of corporate community. A similar approach can be used to analyze interconnectedness of politicians resulting from their common affiliations in the past, through the concept of 'interlocks' (Mizruchi 1990) and 'associations' (Knoke 1986), when common affiliations of actors are traced. Some recent studies also suggest applying similar approach to analyze the unity of corporate actors in policy development (Dreiling, Darves 2011) and homophily — meaning that "a contact between similar people occurs at a higher rate than among dissimilar people" (McPherson et al. 2001: 416) — when studying joint legislative initiatives submission in the beginning of the parliament's term.

Four hypotheses stemming from the existing network research tradition are tested within this paper through the application of various network measures and routines. The assumptions can be listed as follows:

- (1) elite members are better connected with the common past than with the submission of joint legislative initiatives, however, the cohesiveness of the network of joint initiatives varies by subgroups;
- (2) actors most central in the network of the common past are also the most central in the network of joint draft laws submission;
- (3) new-comers* are less central than survivors in the network of joint draft laws submission;
- (4) those parliamentarians who were connected through common past tend to cooperate with each other, in other words, the homophily principle holds for the joint initiatives network.

The list of political elite members was compiled according to the positional approach when those who possessed the highest positions in power are considered to be the 'elite', the ruling class. (This approach is limited with the formal definition of power as opportunity to influence state decision-making, while there may be hidden actors, so-called 'éminences grises' in the country and outside). The list of actors includes 504 persons who occupied the top positions in the legislative and executive branches of Ukraine at the national level in 2007–2010. These positions are in the Verkhovna Rada, the Cabinet of Ministers, and the Presidential Secretariat.

The analysis includes the sample of 1108 draft laws (*'zakonoproekty'*) submitted during October 2007 — March 2008, i.e. during the first 6 months after the elections on September 30, 2007. The process of the draft law to be approved by the parliament and

* 'New-comers' are those who were not among the state-level elites till that year of the parliamentary elections, but were elected or appointed in 2007. The term 'survivors' used further in the paper refers to the elite members who managed to stay in power from the year indicated: there are 'survivor since 2002' and 'survivor since 2006' who have been on top executive and/or legislative positions from 2002 and 2006, respectively, till 2010, the year of the last Presidential elections (Kostiuchenko 2012).

by the President might take months or even years, so we can assume that ‘teams’ of two, three or more political elite members who have a common past would prefer to work together to make this process faster — preference for working with reliable partners, with those whom they ‘*can trust*’.

The structures of joint initiatives network and biographical affiliations network were built through mapping two respective types of ties: (a) common affiliation with the same institution, organization, enterprise, club or other entity in the particular period in the past (the biographies were used to track them); (b) joint submission of the draft laws during October 2007 — March 2008.

Further, basic network measures were calculated* to analyze cohesive subgroups and to test the hypotheses suggested.

Results

A visualization procedure** assists in observing the network structures mapped using the data on common past (biographical data) and joint legislative initiatives (submission of the draft laws). The resulting graphs can be seen in Figure 1 and Figure 2 below. However, visualization only gives a hint of what the network structure looks like — to understand and compare the networks we need to calculate several indicators.

*Density.**** The density of the network based on common biographical past is only 2.03 %.**** However, the network of draft laws joint submission is even less dense: the density is 1.16%. At the first glance, this outcome demonstrates that political actors are slightly connected with the common past, but they are even worse connected with the current legislative initiatives. However, if we refer to the real number of all possible connections between 504 actors, even the density of 1.16 % means that almost 3 000 ties out of all possible connections (over 250 000) are present in the network of joint legislative initiatives. Similarly, the density of 2.03 % in the network of the common past includes about 5 000 biographical ties. This amount of ties is enough to support our first hypothesis assuming that elite members are better connected with the common past than with the joint legislative initiatives submission.

Cliques. Another routine we can apply to explore the network of joint draft law submission with regard to its cohesiveness, as mentioned in the first hypothesis, is the analysis of clique membership. In the network analysis, cliques are the subgroups where all actors are connected with the others; and the minimal clique is a triad. In the

* All calculations were made using UCINET software (Borgatti et al. 2002).

** Visualization was performed in NetDraw application of UCINET software (ibid.).

*** Density is the basic network measure that is calculated as the proportion of all present ties to all possible (Scott 2000: 69–71). In case of the binary network, the density varies from 0 (no ties exist between the actors) to 1 (all possible ties are present).

**** The density was also calculated for subnetworks, including political connections (1.15%), business connections (0.06%), nonprofit connections (0.64%), and educational connections (0.24%), though the values are too small — due to the number of actors in the subnetworks.

network of joint draft law submission we found 144 cliques with 3 actors, 56 cliques with 4 actors, and 22 cliques with 5 actors.

Any cliques sharing one or two actors and creating cohesive subgroups in the network can be potentially used for lobbying or promoting a particular draft law. Thus, the large number of 3-member cliques may show the diversity of interests in the network. The formation of triadic subgroups probably starts with a dyad — when two elite members submit several draft laws together. However, their interests might require additional support from a third actor influential in the area of the draft law submitted, who is not a constant partner in triadic coalitions. This cooperation is rather short-term being caused by the diversity of spheres in which legislation is developed — from industry and agriculture to education and social welfare system: parliamentarians are usually members of specialized committees in the Verkhovna Rada to allow specialization in legislation development, however, it often happens that deputies from different committees submit legislative initiatives together if the draft law lies on the edge of expertise of two or more committees and an influential figure from a non-represented field of expertise is needed.

As for the larger 5-member cliques, there are only 22 of them, and this number is rather low for the total network with over 500 actors. These cliques might be the groups of elite members who have common mid-term interests and goals in legislation development. They can work on a package of draft laws directed on the specific issue or problem. Such strategy is probably more effective in getting their draft laws approved, compared to short-term cooperation.

Thus, cliques analysis supports the first hypothesis showing that the cohesiveness of joint initiatives network varies depending on the number of actors in the subgroup.

*Centrality measures**. The average degree centrality of the joint initiatives network is 2.89. According to the interpretation of the degree centrality measure**, this result means that each elite member is connected to 3 others through preparing draft laws, on average. At the same time, the mean for degree centrality based on common biographical experience is 10.18; thus, there are 10 alters, on average, with whom the political elite members have a common past.

The centralization index in the first network is 3.42 %, while in the second it is 9.34 %. The accumulation of ties around particular actors in both networks of draft laws submission and common past means that there is a group of actors who are significantly more central in these two networks than their peers. In order to define whether these most central actors are the same in the two networks, we should compare

* There are several approaches to define central actors; two most popular are to calculate the direct ties to the actor's neighbours or to define the "bridging" actors who join subgroups and might serve as gatekeepers in the network. More details about centrality measures within and between subgroups are available in a work by M. Everett and S. Borgatti (Everett & Borgatti 1999).

** Degree centrality is a measure that shows how many direct ties actor has with his neighbours. This simple indicator is often applied when it is necessary to define locally powerful and influential actors. For networks analyzed in this paper Freeman's Degree Centrality was calculated (Hanneman & Riddle 2005).

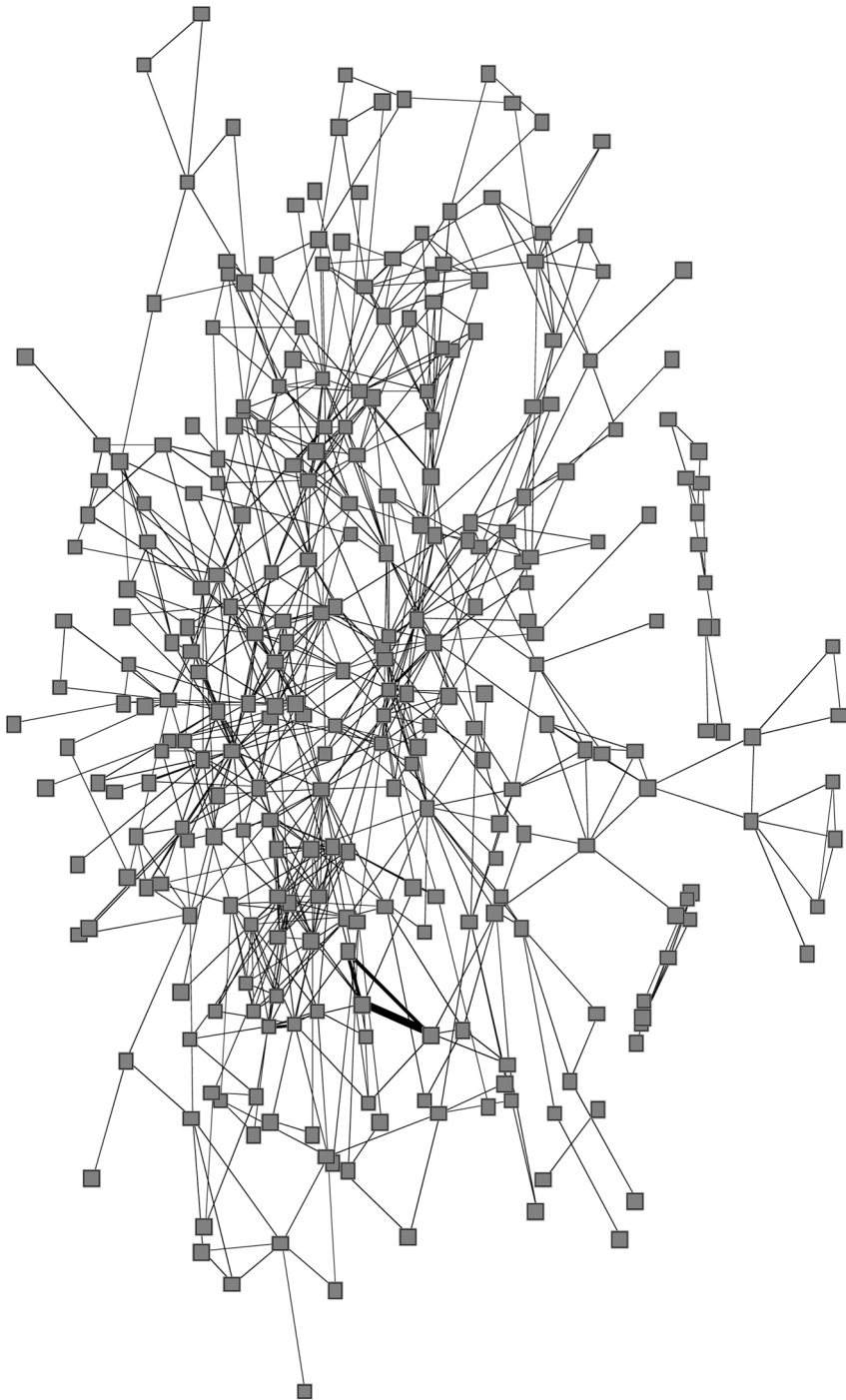
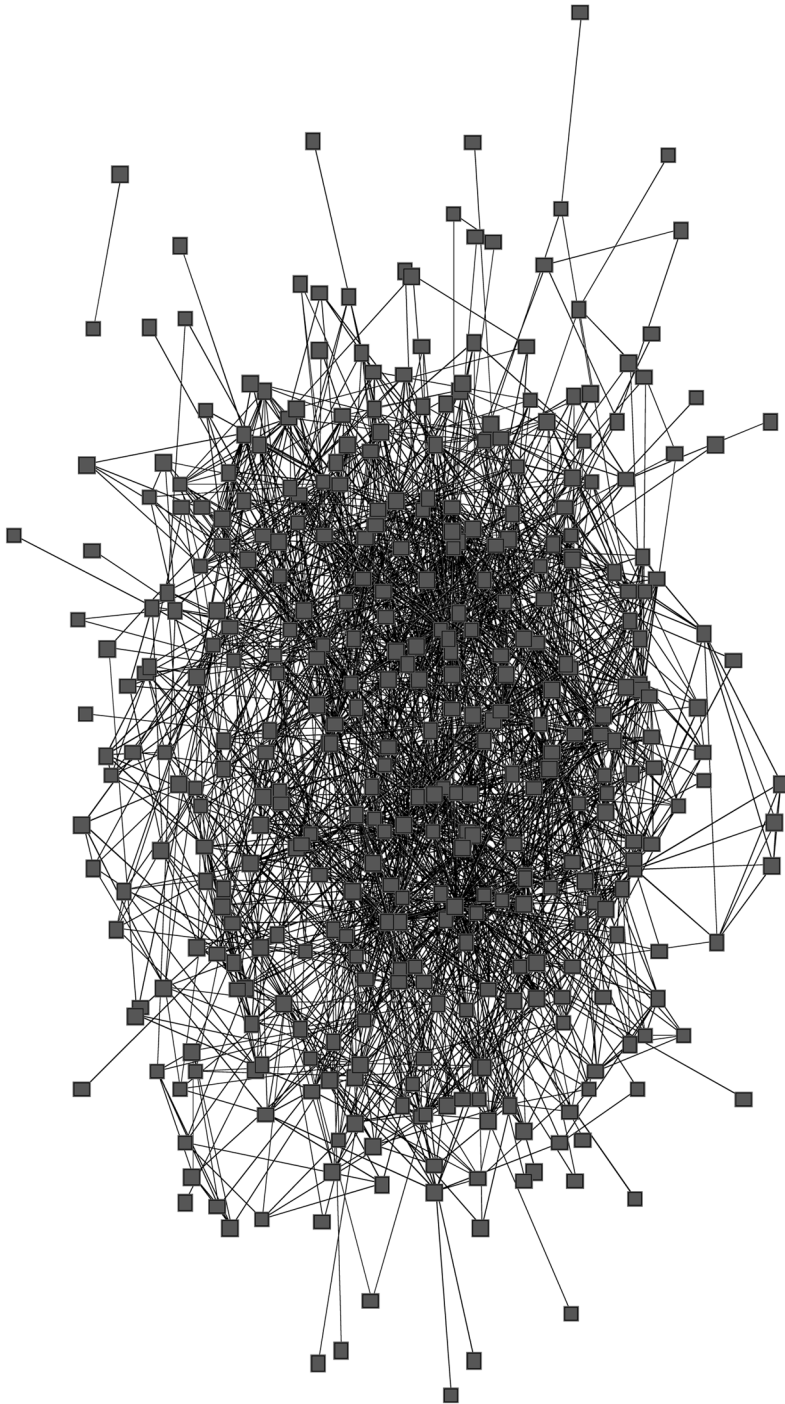


Figure 1. The network of actors connected with joint submission of draft laws between October 2007 and March 2008*

* Spring Embedding is used as visualization layout, Gower scaling applied.



*Figure 2. The network of actors in power during 2007–2010 connected with common past (biographical data)**

* Spring Embedding is used as visualization layout, Gower scaling applied.

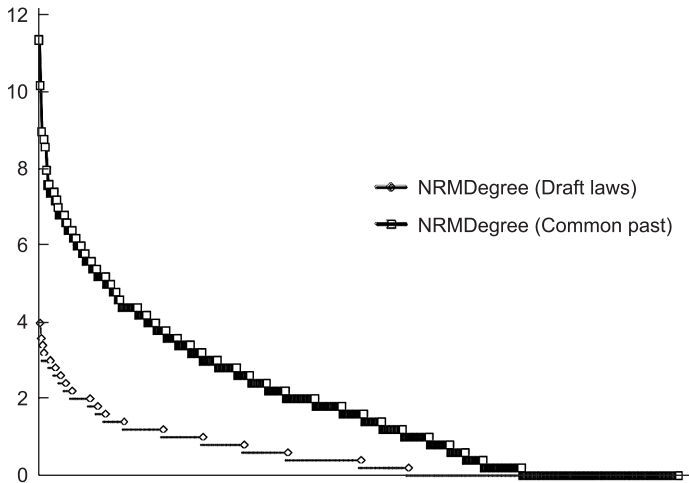


Figure 3. Distribution of the degree centrality calculated for both networks (draft laws submission and common past)

the top of the lists of actors by degree centralities (Figure 3). According to one of our hypotheses, the central actors in both networks will be the same, at least in the top of the ranking by centrality. However, Table 1 demonstrates that these lists differ. Only one actor (*KyrylenkoVA*) appeared twice — both in the centrality ranking of the network of common past with other deputies, and in the ranking of degree centrality based on joint submission of draft laws. This result is rather surprising; it provokes hesitation in accepting the assumption stated above — about the tendency among elite members to develop draft laws together on the basis of common biographical experiences.

Table 1

TOP20 by degree centralities for both networks

Network of joint draft laws submission			Network of common past		
Elite member	Degree	NrmDegree	Elite member	Degree	NrmDegree
Stoyan	20	3.98	Yanukovich	57	11.33
Suhyi	20	3.98	Rybak	51	10.14
Kniaevych	18	3.58	Hryniv	45	8.95
Liapina	17	3.38	BondarenkoOF	44	8.75
Sas	16	3.18	Doniy	44	8.75
BondarenkoVV	15	2.98	Holovatyi	43	8.55
Karpuk	15	2.98	Koval	40	7.95
KyrylenkoVA	15	2.98	Hudyma	38	7.55
KyrylenkoIH	15	2.98	KliuyevAP	38	7.55

Network of joint draft laws submission			Network of common past		
Elite member	Degree	NrmDegree	Elite member	Degree	NrmDegree
MatveyevVI	15	2.98	Lavrynovych	37	7.36
LytvynVM	14	2.78	Stetzkiv	37	7.36
Symonenko	14	2.78	Shkiria	37	7.36
Turchynov	14	2.78	Yankovskyi	37	7.36
Sharon	14	2.78	KyrylenkoVA	36	7.16
Zats	13	2.58	Konovaliuk	36	7.16
Kaskiv	13	2.58	KostenkoYuI	35	6.96
Martyniuk	13	2.58	Zarubynskyi	34	6.76
Moisyk	13	2.58	Skudar	34	6.76
Azarov	12	2.39	Tarasiuk	34	6.76
Bohytskyi	12	2.39	Tretiakov	34	6.76

Above we hypothesized that the most central actors are not ‘new-comers’, but rather ‘survivors’ embedded in the political network and therefore able to produce more efficient activity in the legislation process and submitting co-authored draft laws. This assumption can be checked using the results of our previous study of the political elite circulation in 2002–2010 (Kostiuchenko 2012). The circulation status of the elite member — ‘new-comer’ or ‘survivor’ — is added as an attribute and compared with degree centrality scores in Table 2.

Table 2

TOP20 by degree centralities for joint legislative initiatives network compared with elite members’ circulation status

Elite member	Degree	NrmDegree	Circulation status in 2002–2010
1. Stoyan	20	3.98	survivor2002
2. Suhyi	20	3.98	survivor2002
3. Kniaevych	18	3.58	survivor2006
4. Liapina	17	3.38	survivor2002
5. Sas	16	3.18	survivor2002
6. BondarenkoVV	15	2.98	survivor2006
7. Karpuk	15	2.98	survivor2006
8. KyrylenkoVA	15	2.98	survivor2002
9. KyrylenkoIH	15	2.98	survivor2002
10. MatveyevVI	15	2.98	returner
11. LytvynVM	14	2.78	returner

Elite member	Degree	NrmDegree	Circulation status in 2002–2010
12. Symonenko	14	2.78	survivor2002
13. Turchynov	14	2.78	survivor2002
14. Sharon	14	2.78	returner
15. Zats	13	2.58	survivor2006
16. Kaskiv	13	2.58	new-comer
17. Martyniuk	13	2.58	survivor2002
18. Moisyk	13	2.58	survivor2002
19. Azarov	12	2.39	survivor2002
20. Bohytskyi	12	2.39	survivor2002

The column with circulation pattern indication becomes the vivid evidence of the prevalence of ‘survivors2002’ among highly central actors in term of joint legislative initiatives. In other words, there are 11 actors who managed to stay in power since 2002 among the most active and cooperative legislators between October 2007 and March 2008. They were in power during the 4th and 5th terms of the Ukrainian parliament and were better embedded into the legislative mechanism of the state, which allowed them continue to be actively involved in the submission of joint draft laws during the first 6 months of work of the Verkhovna Rada of the 6th term. The Prime Minister of the time (*Mykola Azarov*) also appeared in this group, though his career in politics started much earlier than 2002. Besides, there are several ‘survivors 2006’ — those who got power position after the parliamentary elections of 2006 and kept it after the pre-term elections of 2007. Another small group is ‘returners’ — those who were in power in 2002–2006, lost their positions after the parliamentary elections, and then returned to parliament 1,5 years later, after the pre-term elections.

QAP Correlation. This routine may be used to check the fourth assumption, specifically — to define the overlapping between the two networks under analysis*. The correlation coefficient appears to be only 0.034, which shows rather weak correlation between the matrices; however, even this low correlation is significant (p-values are lower than 0.05).

Conclusion

The analysis and comparison of the two networks — one based on biographical connections, and the other one based on joint draft laws — brought the following outcomes with regard to the four hypotheses formulated.

* The procedure allows for correlating two and more matrices with the same list of actors. As a result, we receive output with the correlation indices and indication of the significance level with p-values (the correlation is treated as significant if p-values are lower than 0.05).

(1) The first hypothesis is supported — the network based on biographical connections is denser than the one with the joint legislative initiatives (1.16 % and 2.03 % respectively) and the cohesiveness of joint initiatives network varies depending on the number of actors in the subgroup: the network of draft laws submission has over a hundred cliques with three members, but very few cliques (over 20) with five members. The latter might be an illustration to two different strategies of draft laws submission. The first is rather based on short-term cooperation in various topics, and such partners do not tend to share many interests or goals, the aim of their collaboration is rather pragmatic: to empower the initiative currently introduced by inviting an influential partner to join. The second strategy might be a mid-term one as it joins 5 actors into a group more stable in its actions and probably more integral in its ideology — in order to form a team of 5 people they usually have to continuously demonstrate to each other at least some commonality or similarity.

(2) The second hypothesis about similar degree centrality ranking of the same actors in the two networks was not supported by the evidence at hand. The TOP20 of the central actors in the network of draft laws submission principally differs from the TOP20 in the biographical network; only one person appeared in both rankings. One of the reasons for this might be that the actors who are the most central in terms of the common past do not aim to get better connected with the others through joint legislative initiatives; alternatively, those with the highest degree centrality in submitting joint draft laws might try to compensate the lack of direct biographical ties with colleagues through the more active legislative activity.

(3) The third assumption about higher centrality indices of ‘survivors’ comparing to ‘new-comers’ was supported. Politicians who have been occupying power positions since 2002 tend to be more central in the network of joint legislative initiatives than the newcomers. This is probably because the newcomers need some time to adopt the ‘rules of the game’ — to learn all the formal procedures along with informal mechanisms of how the legislation process is organized — starting from the design of the draft law up to the approval of the new laws. This outcome also demonstrates that, in the beginning of the new parliament term in autumn 2007, MPs were more active in submitting joint draft laws and therefore were more central actors in the respective network. However, for the future it might be the evidence that a ‘newcomer’ cannot actively participate in the policy-making process; he or she has to integrate into the political elite network first in order to act as a co-author of the draft laws.

(4) Finally, the assumption about the overlapping between the networks of common past and joint draft laws submission is not completely supported. We hypothesized that the new elite members who had just entered the parliament in 2007 relied on the previous or on current connections, especially on those ties that were formed while working with somebody or studying in the same educational institution. However, the correlation index between the matrices of biographical connections and joint draft laws submission is very low (0.034), though significant (p-values are lower than 0.05). This means that the actors do not tend to combine the two types of connections and to rely on biographical ties when working on a draft law. Nevertheless, further exploration of this aspect overlapping of networks is needed in order to prove or decline the initial hypothesis.

Generally, we can conclude that neither common past nor joint legislative activities densely connect all the actors within political elite of Ukraine. However, we can find more important and better embedded actors in both dimensions, although these top/central actors are not the same for the two networks analyzed. With regard to the circulation pattern, actors who have remained within the political elite since 2002 tend to be more active in joint draft laws submission than the ‘new-comers’. Finally, the two types of ties under analysis — common past and joint draft laws submission — do not overlap as often as we expected. Keeping in mind that we analyzed only the draft laws submitted in the beginning of the 6th term of the Verkhovna Rada it might be suggested that a longer period included into the analysis should bring some corrections and possible new details into the current picture. Great potential lies in the dynamic networks modeling and use of various time slots. In our case it may be a biannual mapping with several time slots used in the final analysis. Statistical procedures available in Siena or StatNet would be useful to model the behaviors of the network actors depending on their positions and the network structures configurations in general.

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