

Persistence of informal networks and liberal peace-building: evidence from Bosnia and Herzegovina

Vesna Bojicic-Dzelilovic, Denisa Kostovicova and Ahmet Suerdem

Abstract

Informal networks persist after conflict and undermine liberal peace-building. While these adverse effects are well-known, how informal networks survive beyond conflict is less understood. Scholars explain informal networks' persistence by their stability and cohesion, attributed to solidarity of ascriptive bonds such as ethnic ties. In these accounts, networks are approached as actors and not as relational structures. We address this gap in the peace-building scholarship and conduct a longitudinal study of relations within an informal network in Bosnia and Herzegovina. Drawing on the political approach to networks, and applying Social Network Analysis, we investigate actors' relational power and reveal how network actors use their connections to create strategic coalitions and opportunistic collaborations enabling them to exploit different stages of the peace-building process. We demonstrate that unequal distribution of relational power creates vested interests in sustaining the network and in seeking access to it, and how dynamic reconstitution of relational power within the network ensures continuity of network action from war to peace. From a policy perspective, this structural account of informal network persistence suggests a need for better understanding of the dynamics among co-ethnics within an informal network that allows network members to subvert efforts to counter informality and undermines post-conflict institution-building.

Key words: informality; peace-building; informal networks; relational analysis

Introduction

After the end of the war in Bosnia and Herzegovina in 1995, the international community oversaw the reconfiguration of the country's political and economic system. The transition to liberal democracy and open market economy was accompanied with an expansion of informality. Defined as a practice of extra-institutional exchange, informality involves various forms of disregard for formal rules such as evasion, avoidance, and rule bending (Feige and Ott 1999). The Bosnian case is not unique. It represents a paradox of Western interventionism in post-war countries, where liberal peace-building coincides with the growth of informality most evident in widespread informal economy (Belloni and Strazzari 2014; Stewart and Knaus 2011; Efendić, Pugh and Adnett 2011).

Unintended consequences of post-war liberal peace-building are commonly explained by the resistance of local actors and their networks in post-conflict zones as diverse as Sub-Saharan Africa, the Balkans, South Caucasus, and Central and Southeast Asia (Mac Ginty 2011:17; Alley 2015:114). The study of informal networks brings together a multitude of actors including politicians, armed groups, criminals, civil society representatives, religious leaders, and businessmen. It is a part of the 'local turn' in liberal peace-building scholarship, which is motivated by a need to better understand and address peace-building challenges (Mac Ginty and Richmond 2013; Autesserre 2014). In the extant scholarship, the persistence of informal networks after a conflict is attributed variously to ethnic solidarity among its members, commercial links forged through the participation in war economy, or their parallel existence to post-conflict states rooted in patronage and clientelism (Sexsmith 2009:85; Staniland 2012:159; Maley 2013:260; Harkness 2016:596; Kingston and Spears 2004; Carayannis et al 2018). These explanations focused on prominent players in post-conflict contexts, usually at the apex of political, military, economic and criminal structures, and their observable relations, assume that network members along with their incentives and interests are static. By doing so, they neglect the question whether informal networks change along the war-to-peace continuum, which according to Donais's (2005) account of those networks (69-70;73-76), leaves the 'mechanics of their operation' (ibid:85) underexplored.

This blind spot in the liberal-peace building scholarship is a result of studying *networks-as-actors*, as opposed to *networks-as-structures*.¹ Liberal peace-building scholars have not studied relations between network members as a unit of analysis (Bojicic-Dzelilovic and Kostovicova 2012). Consequently, they have overlooked the actors' relational power, which derives from their position within a network (Wasserman and Faust 1994), and how their power changes as a potential explanation of network persistence. A lack of understanding of actors' relational power and the associated power-dynamics inside networks has stymied efforts to counteract their disruptive impact on liberal peace. As Jackson and Nelson argue (2019:595), relations can function as causal powers making possible certain outcomes rather than others. A study of network relations can reveal how actors use power that derives from their interactions with other actors and offer a novel insight into a survival of an informal network during peace-building.

We leverage a political perspective on social network transformation theories (Wood 2008; Meagher 2005), and apply Social Network Analysis (SNA), to investigate the relational structure of a Bosnian Croat informal network that has survived since the end of the Bosnian war. We define network structure as a configuration of social relations (Cook and Whitmeyer 1992), which represent actors' everyday purposive exchanges of valued items. These can be both material and immaterial, and are embedded within a concrete, ongoing systems of social relations (Granovetter 1985: 487; Jackson and Nelson 2019: 585-6), and not as immutable or culturally derived.

We show how the distribution of relational power changes in different phases of the peace-building process impacting on network actors' incentives and interests. The empirical evidence exposes a spectrum of influential actors who are overlooked when focusing on actors' attributes (such as seniority or rank), and reveals how connections are used to mobilize different resources in state structures, the commercial sphere and in civil society to the benefit of network members all the while ensuring that an informal network's social base is renewed and adjusted. Ultimately, we demonstrate how dynamic reconstitution of relational power within the network preserves the network's common purpose, ensuring continuity of network action from war to peace. As we show, an informal ethnic network does

not persist simply because of inherent solidarity and trust among co-ethnics involved in reciprocal transactions. There is rivalry among co-ethnics which is driven by differences in their relational power determined by the density and the form of ties in actors' possession. The benefits of network membership are unequally distributed, which creates incentives to sustain an informal network and to seek access to it. In contrast to understandings of informal networks as stable and cohesive entities that undermine peace-building—a perspective rooted in the analysis of groups in conflict—our empirical evidence drawn from studying network relations shows that key to their durability is inner fragmentation, and a changing distribution of relational power over time.

The article proceeds with an overview of existing explanations of persistence of informal networks in liberal peace-building scholarship and introduces a political approach. The subsequent section provides the background information, data, and method used in this study. Next, the results and the analysis of the Bosnian Croat network data are presented. The concluding section summarizes the findings and reflects on their theoretical and policy implications.

Informal networks in peace-building: the need for a political approach

Current understanding of the persistence of informal networks in the liberal peace-building scholarship is underpinned by three research paradigms: 1) the stickiness of ethnic ties arising from primordial loyalties; 2) networks' rootedness in the war economy; and 3) their existence as an alternative authority to the state. Below, we discuss these paradigms as ideal-type arguments, focusing on analytical constructs that explain network persistence, and outline their limits. We then propose a political approach to the study of networks that pivots on the relational power of network members to explain *how* networks persist from war into peacetime.

Explanations that foreground considerations of ascriptive identity of network members embed informal networks in local culture and history. Attributing their resilience to the stickiness of ethnic ties highlighted in the analysis of contemporary wars, these accounts put networks on a normative

scale—as either positive organizational forms that generate social capital, or negative sources of clientelism—which are deemed useful for overcoming the collective action problem in a society (Cox 2009: 2; Sexsmith 2009: 82; Sharan 2011: 1120). In both cases, cooperation and solidarity derived from ethnic or other identity ties bind network members ensuring trust, information sharing and mutual obligation, during and after a conflict. Focusing on the so-called ‘ethnic kin effect’ (McDoom 2014; Fuji Lee 2008), scholars have argued that ethnic ties are ‘activated’ and deployed during the war (Kilavuz 2009: 694; Carayannis 2003: 233; Reno 2007: 326). After the war ends, these ascriptive ties, hardened by the brutality of war, empower ethno-nationalist political elite networks that undermine peace-building (Toal and Dahlman 2011: 303). While these networks may coalesce around identity axes, we cannot simply infer that the solidarity of ethnic ties accounts for these networks’ durability from the war into the post-war period.² Such inferences result from what Wimmer (2013: 6) refers to as the ‘ethnic lens’ of interpretation, which in turn calls for ‘a more systematic disentangling of ethnic and nonethnic processes’ and questioning of the assumption of solidarity among co-ethnic actors within a network.

Another set of explanations of network persistence emphasizes path dependent survival of informal networks rooted in war economy. Proliferation of transnational militarized conflict networks is identified as the most prominent feature of contemporary wars (Duffield 2002a: 1059; Carayannis 2003: 235; Carayannis et al 2018: 19-21; Smicek 2010; Kaldor 1999; Jung 2003). Evidence across the world’s conflict zones abounds of the linkages between political, military, economic, and criminal actors which enable access to global commercial flows to fund combat and other needs (Nitzschke and Studdard 2005: 222; Andreas 2004; Stuvøy 2002: 9,13; Eaton et al 2019). In the war economy scholarship, informal networks are conceptualized as criminal, cross-border formations capable of surviving the reach of liberal reforms in institutionally fragile post-war contexts (Palma 2015). Criminalization of the war economy reinforces economization of its protagonists’ war motives (Münkler 2004: 22, 92; Dziedzic 2016), which in turn explains the density of cross-cutting linkages among different types of actors and across different scales at which the war economy operates. These

linkages through profitable economic transactions trump ascriptive ties, which can be ethnic or inter-ethnic, and explain the durability of informal networks after the end of war (Pugh 2002: 467; Peterson 2015; Studdard 2004). Kurtenbach (2010: 100) argues that ‘war economies build political and social power structures [that] overall limit peace-building efforts as well as economic and political transformation’ (see also Dziedzic, Rosenau and Williams 2002: 2 on the Balkans). Most importantly, these path dependency accounts of informal networks assume—without providing empirical evidence—that ties rooted in the war economy endure into peacetime. They point to prominent war economy actors who continue to play a role in post-war peace-building.³ However, this falls short of providing evidence of the existence, nature, and durability of ties forged through war economy along the war-to-peace continuum.

Lastly, from the rationalist-institutionalist perspective, also known as a Weberian or neo-Weberian perspective, informal networks are seen as existing in parallel to formal institutions, which represent rules ‘officially and publicly codified by the state in written form’ (Hale 2011: 581). As parallel/informal governance structures, depicted by concepts of captured states or states-as-empty-shells (Wennmann 2009: 2011; Cheng and Zaum 2012; Chayes 2015), informal networks operate through personal connections rather than formal bureaucratic channels and procedures (Reno 2009: 55; Barma 2017: 25,152). Some scholars go further. They equate informal networks with informal institutions, as the collection of norms, conventions and moral values which shape actors’ behavior. Such institutions are embodied in patronage networks, commonly used as shorthand for informality in the liberal peace-building scholarship (Philip 2008: 314; Börzel and Risse 2015).⁴ Their argument is illustrated by the ability of local strongmen emboldened in the context of armed conflict to use their personal networks to hold on to their fiefdoms and ‘spoil’ formal institutions built by external peace-builders through a combination of corruption and intimidation (Rayemakers 2013: 612; Maley 2013: 256; Jones 2010: 548). Thus, from the Weberian institutionalist perspectives, informal networks are stable formations characterized by transactional exchanges and vertical power hierarchy of patron-client relations, exemplified by governance in post-Taliban Afghanistan which according to Sharan (2011:110) follows

‘logics of ethnoregional solidarity and patron relations’. Informal network persistence is explained on the grounds of who network members are and how their attributes affect choices they make, while the salience of common ethnicity or other ascriptive ties is implied.

Overall, structural properties of informal networks constituted by relations between different actors are absent in these descriptive, categorical perspectives on informal networks prevalent in liberal peace-building scholarship. Neglecting the configuration of network relations, such accounts overlook the dynamics and patterns of change within a network as peace-building alters its operational context and with it, actors’ positional power, interests and incentives.⁵ By contrast, scholars of the social processes of war have pointed to the transformation of social actors, structures and norms, which impact on post-war transition (Wood 2008; Ilkhamov 2007: 70; Büscher 2012; Duffield 2002b). For instance Wood (2008: 540) contends that networks are dynamic and change in many ways, including ‘creating new networks, dissolving some, and changing the structure of others [...]’. Although these scholars reject the static understanding of network configurations that beguiles much of the descriptive discussion of networks in the liberal peace-building literature, their explanations stop short of engaging with inequalities of power, strategic coalitions, and opportunistic collaboration arising from the structure of relations *within* a network. In particular, explicit or implicit reference to solidarity of ethnic ties in various accounts of informal network persistence in peace-building scholarship, disregards power inequalities which exist even in very basic social ties.⁶ Meagher (2005: 225) specifies that ‘kinship ties are likely to be characterized by power asymmetries as well as a sense of moral obligation,’⁷ which is why the assumption of intra-ethnic-solidarity must be questioned (Christia 2008; Pearlman and Galagher-Cunnigham 2012; Kim 2010). Consistently with a relational perspective, the intra-ethnic rivalry within a network needs to be inferred from considering actors’ power that derives from the pattern of their relations within a network.

Lake and Wong (2009) point to several facts that underscore the necessity of the political approach to networks as organizational forms: network nodes can make utility-improving choices; different outcomes have different distributional implications; and the influence and power of different nodes

vary depending on their position within a network. Given these dynamics, they argue, ‘nodes will attempt to manipulate others in the network to produce desired outcomes, requiring a more political approach’ (*ibid.*: 130). Consequently, politics within a network emerges from exchanges between individual actors. From the relational perspective, the structure emerging from their interactions both constrains and empowers network members, who are socially-embedded actors. Power is about holding an advantageous position within a network that enables an actor to influence or dominate others, or to use other actors to promote certain interests and behaviors (Hanneman and Riddle 2005). Different positions inside a network confer different opportunities and impose different constraints on their ‘occupants’ in how they facilitate or urge collective action on one another to navigate uncertainties of the changing political, socio-economic and cultural context in war to peace transitions. The political approach to networks allows us to go beyond culturalist and rationalist-individualist explanations of network relations as stable and cohesive entities independent from the context in which they operate, and to examine the network’s inner structure and exploitation of entrepreneurial opportunities in the course of peace-building that sustain it over time.

We apply the political approach while emphasizing a relational understanding of power as positional power to study how an informal network transforms and sustains itself along the war-to-peace continuum, using the results of the SNA analysis of the Bosnian Croat network. First and foremost, we seek to provide empirical evidence for a commonly accepted but untested claim in the liberal peace-building scholarship that informal networks persist from war to peace, that needs to be verified by the longevity of network relations. We then investigate whether there are power inequalities within a network, and how a changing peace-building context affects the distribution of power within a network over time. Lastly, we examine how positional power is used within a network to advance private interests of network members while increasing their stakes in the network’s survival and ensuring continuity of network action.

Data and method

Post-conflict Bosnia is characterized by widespread rule evasion common in countries emerging from inter-ethnic violence where the war economy played a prominent role in conflict dynamics (Heupel 2006; Andreas 2004; Donais 2005). Of many forms of everyday informality crucial “in the pursuit of life projects” in the country (Jansen 2015: 208; Brković 2016), our focus is on institutional transgression. We applied a single-case research design, which allows an in-depth, longitudinal empirical investigation of a phenomenon over a delimited period of time (Gerring 2008: 342; Yin 2009: 14). The collection of data, interviews and fieldwork were conducted from 2009 to 2017. To address the limitations of the categorial analysis of informal networks as actors in the peace-building scholarship, we apply SNA to study networks as (relational) structures. We investigate how dominant exchanges between the members of a Bosnian-Croat informal network change over time and the consequences this has for the network’s internal power dynamics. The SNA results are explained by grounding them into the context through a qualitative interpretative analysis to show how relations are used to sustain the network.

SNA requires data in a matrix form showing the ties between the actors. Commonly, social network analysts measure a tie as an aggregation of the intensities of observed exchanges between the actors such as participants’ self-reporting on friendship, advice seeking, or other types of interactions (Granovetter 1973). However, this method has been criticized for being susceptible to different kinds of cognitive bias, especially in the longitudinal study of networks (Bignami-Van Assche 2005; White and Watkins 2000; Goldsmith and Lysaght 2012; Raab and Milward 2003). In the study of informal practices in a peace-building context, inferring network ties through a survey or self-reports is not feasible or productive, as ‘actors that are unobservable to the researcher’ cannot be identified in the traditional sociometric analysis’ (Burt and Lin 1977: 225). Krackhardt (1992) suggested that estimating interactions in an interpretive way by a third party could lead to more reliable and consistent observations compared to self-reporting. Accordingly, we derived the exchanges between actors using an archival method, which allows us to examine ‘measurements taken from the record of interactions’ (Wasserman and Faust 1994: 50). The archival method ‘uses the content analysis of archival records to describe the relations between actors in terms of their joint involvement in events of consequence for

actors in the social system' (Burt and Lin 1977: 226). It is particularly conducive to longitudinal study of networks and their transformation (Burt and Lin 1977: 226; Padgett and Ansell 1993: 1262), and especially of 'covert networks' (Raab and Milward 2003: 435; Helfstein and Wright 2011).

To study the development of relations over time, we examined three phases along the war-to-peace continuum as specified by scholars of liberal peace-building:⁸ i) the 1992-1995 war period, when Bosnian Croats took up armed struggle under the pretext of protecting Bosnian Croat political and social interests; ii) the initial post-war introduction of liberal political and economic institutions from 1995 to 1999 under the terms of the Dayton Peace Agreement; and iii) the institutional consolidation (post-1999) during which Bosnian Croats self-rule was initiated through the establishment of the Croatian Peoples' Council. Next, we selected a range of different exchanges that would allow us to operationalize a tie for each period.

Ties are established through a multiplicity of interwoven exchanges (Kapferer 1969) leading to the emergence of a structure, which, in turn, constrains actors' exchanges. An exchange can be defined as a result of an actor's motivated interest to interact with another actor to exchange a valued item. The exchanges may refer to a wide spectrum of interactions such as communication, economic transactions, and political influence and each context prioritizes certain forms of exchanges. Drawing on the approach in the study of covert networks focused on a significant event, in each period we identified a significant event and actors involved as a starting point to map relations (Basu 2014). From the archival material, other open-sources and field interviews, we constructed personal biographies for each actor and systematically mapped connections among actors contemporaneously and longitudinally.

For the first period, we traced exchanges among the group of actors involved in the operations of the military logistics center supporting Bosnian Croat combat activities, which was based in the town of Grude. Grude's proximity to Croatia's border and uniform support for the Bosnian Croat political agenda among its ethnically homogenous Bosnian Croat population, afforded this small provincial town the role of the central logistical hub for the Bosnian Croat military effort, and supporting environment for the network's activity.⁹ The group consisted of military and civilian personnel, all of

whom were members of the Croatian Democratic Union of Bosnia and Herzegovina (HDZBiH), the strongest political party among the Bosnian Croats at the time. Some hailed from Grude area itself and in some cases the personal relationships predated war-time collaboration. We considered the following exchanges to be essential for the maintenance of the group during an armed struggle: i) political directives issued by the top Bosnian Croat political leadership to the members of the group based in the logistics center; ii) military orders regarding the organization of logistical support for Bosnian Croat armed troops, and iii) friendship among group members. For the second period, we traced the set of economic exchanges enabling the network to direct the financial flows in Bosnian Croat majority areas of Bosnia and Herzegovina. To estimate these exchanges, we used data on the shareholder structure of the companies linked to network members and the composition of their management and executive boards, and on the financial transactions (e.g. share swaps, commercial loans, cash transfers) among the companies, government offices, non-governmental organizations, and individuals. Finally, for the third period, we mapped the following exchanges: i) political orders to network members in joint central Bosnia and Herzegovina state- and Federation-level institutions; ii) commercial transactions among public and private companies, cash transfers to non-governmental organizations, cash payments to the individuals supporting the self-rule initiative, and iii) friendship among the actors involved in the self-rule initiative.

We traced the relations between the pairs of actors in terms of identified exchanges using following sources. The first set of sources included articles in 18 print media outlets (daily newspapers and weekly magazines) in Bosnia and Herzegovina and in Croatia from 1992 to 2015.¹⁰ The second set comprised transcripts of verdicts of the Bosnia-Herzegovina Court's Special Department for Organized Crime and Corruption, the Herzegovina-Neretva Canton Court, and the International Criminal Tribunal for former Yugoslavia (ICTY). The third set consisted of financial reports issued by Bosnia and Herzegovina's Office for Budget Revision, the Federation Defense Ministry, and the Federation of Bosnia and Herzegovina Financial Police. The fourth set consisted of a sample of original documents including the minutes of the meeting to establish Hercegovacka Banka (the Bank)- a financial institution central to the network's commercial operations (see Bojicic- Dzelilovic 2006; Grandits

2007), and the meeting to set up Bosnian Croat self-rule institutions provided by our informants. Finally, we analyzed European Union Annual Progress Reports on Bosnia and Herzegovina, documents issued by the Office of the High Representative (OHR), and reports by Bosnia and Herzegovina Transparency International. To ascertain network members and network boundaries, and while recognizing that data on informal networks may never be complete (Goldsmith and Lysaght 2012: 3), we triangulated the information from the sources listed above with a series of field interviews. For this purpose, we conducted 20 semi-structured, in-depth interviews with civil society members, government officials, businessmen, academics, and investigative journalists in Mostar and in Sarajevo with expertise in informal economy and corruption.¹¹ These procedures helped us to identify who is connected to whom according to what type of exchange and yielded a network of 36 nodes.¹²

We compiled three network data sets consisting of three different exchange matrices for the first and the third period each, and one exchange matrix for the second period. An exchange matrix shows connections among actors in an exchange that is estimated through the procedure described above. The cell content is denoted X_{ij} ; when there is a connection between two actors $X_{ij}=1$; otherwise $X_{ij}=0$. Since we postulated a tie as a combination of different exchanges for a period, we aggregated exchange data for each period by calculating their sums and dichotomized them as binary variables where the mean is the cut-off value. This aggregation is necessary for scaling the data to implement a more ecologically representative process (Budescu 2006), since subjectively collected data can skew estimates (Harvey, Bolger and McClelland 1994). We selected the arithmetic mean because it usually performs better than the median value (Stock and Watson 2004). A networked data set was created consisting of three network matrices showing the ties among 36 network members over the three socio-historic periods between 1992 and 2002: war (P1), post-war institution-building (P2), and institutional consolidation (P3). The total number of ties, density, and average degree for each respective period is presented in Table 1:

INSERT TABLE 1 HERE

With a caveat that there is no absolute measure whether a network is dense or not (Osei 2015: 547), calculated network density scores indicate high level of connection which varies over time. Network density scores are the highest in the second period (post-war institution building) when the task complexity increases and cross-cutting ties multiply. The average degree scores show that the number of connections per each node is significantly higher in this period compared to period one (war) and period three (institutional consolidation).¹³

To analyze the structure of the network and its transformation over time, we used three SNA measures: coreness, centrality, and betweenness (Tables 2-4). The coreness measure allows us to identify which nodes are part of a densely connected core and which nodes belong to the periphery that includes network members with ties to the core group and fewer ties among themselves. Using the core-periphery measure formulated by Borgatti and Everett (2000), we can establish empirically whether an informal network persists from war to peace, and glean whether there is a more densely connected solidary group within a network over the three periods.

Using centrality measures, we investigate the distribution of power within the network in order to understand the network's structural transformation over time.¹⁴ Centrality is different from coreness,¹⁵ as it also incorporates the connections of an actor with weaker, less connected actors (coreness measures only connections within a tightly interconnected group of actors). Centrality measures the strength and number of direct ties to an actor; it captures the advantages of having many ties which allows an actor to use alternative ways to pursue his objectives, and affords multiple means of getting information, punishing deviances and urging collective action on one another (Cook and Whitmeyer 1992: 120; Pavan 2012). Because central actors may draw on the resources of the network as a whole, the centrality measure is useful for identifying which actors are important in maintaining network cohesiveness in different periods (Knoke and Burt 1983).

However, this conceptualization of power was challenged by Bonacich (1987), who argued that power is contingent on the nature of the exchange relations. In the context of 'positive' exchanges such as

communication, power is equal to centrality since being connected to more connected actors increases an actor's power. Collaboration is an act of 'positive' exchange, since all parties extend their efforts to reach a common goal or to accrue individual benefits with the expectation that these efforts will be reciprocated for all members of the group (Staub 2013; Hanneman and Riddle 2005).¹⁶ By contrast, for 'negative' exchanges such as bargaining, where exchange in one relation excludes exchange with others, power comes from being connected to those who have fewer options to connect to other actors (Cook et al 1983). To investigate bargaining/brokering power dynamics within the network, we use two measures: Bonacich negative centrality and betweenness. Bonacich negative centrality allows us to detect actors who are powerful because they have weak neighbors dependent on them to access opportunities available through a network.¹⁷ Betweenness is a measure of the degree an actor lies on the shortest paths among other pairs of actors and signifies that actor's influence over the information flow in a network. This measure identifies actors who can arbitrate and coordinate information in the network, or either withhold or distort it. This gives them bargaining power to isolate actors or prevent connections, as well as the capacity to broker contacts. The two measures taken together help capture the struggle within a network to take advantage of entrepreneurial opportunities and extract personal benefits, and to identify powerful actors with an incentive to preserve the network.

Results and analysis

We now present and analyze the SNA results across the three distinctive periods of post-conflict peace-building, and contextualize them interpretatively by drawing on data and sources used to produce relational matrices for insight into the network's operation and persistence from war to peace.¹⁸ We explain the network positions involving nodes with high SNA measure scores in each period in line with the nature of prevalent exchanges (broadly labelled as military, economic, and political).¹⁹ Lastly, we scrutinize their ties to illustrate how they exercise their positional power to steer and coordinate operations that mobilize resources enabling the informal network's sustenance over time.

INSERT FIGURE 1 HERE

Maintenance of a Core Solidary Group

The analysis of coreness scores produced through SNA of the Bosnian Croat network data presented in Table 2 (higher scores denote the coreness of an actor) indicates the existence of a stable core group of actors across three socio-historic periods spanning war and peace and of a variety of peripheral actors (lower coreness scores) who change over time.

INSERT TABLE 2 HERE

Our findings confirm that the Bosnian Croat network operating during the war persists into peacetime. However, it is only its core that remains intact in the war's aftermath, while the actors occupying peripheral positions change in subsequent periods. The core group consists of actors (M1; M5; M6; Table 2), all high-ranking military officers in the wartime Bosnian Croat para-state Croatian Community of Herzeg Bosnia who interacted through the activities to coordinate logistical support for the Bosnian Croat armed forces during the 1992-1995 war (Case KPV-10/04;²⁰ Malić 2001; Suljagić 2004; Fazlić and Mijatović 2004; Đuričić 2006). Their task was to ensure that Croatia's official and covert financial and material assistance to the Bosnian Croats was managed according to the directives they received from the Bosnian Croat political leadership.

The fragmentation of the network into core and periphery reveals that the degree of solidarity among network actors is not evenly distributed. While our findings based on longitudinal data confirm empirically the claims in the peace-building scholarship that informal networks endure beyond the war's end,²¹ we demonstrate that these claims need to be qualified. Common claims assume the survival of the entire network structure. The presented evidence shows that *only* the network's densely connected core survives intact into the postwar period, while relations with the members in the periphery change. The prevailing arguments in the peace-building scholarship do not differentiate which types of network relations are durable and which are not. Consequently, they are unable to explain how relations among actors in an informal network are reconstituted in a changing political, economic, social, and

governance context in the aftermath of war which alter actors' incentives and motives while renewing its social base.

Internal Cohesiveness and Collaboration

To understand how changes in the type of exchanges along the war-to-peace continuum influence the distribution of positional power, we now turn to the analysis of Bonacich centrality measures. We first analyze the results of Bonacich positive attenuation factor to identify powerful actors in terms of collaborative positive exchanges, which contribute to network cohesiveness. Respective network members' variable scores in the three periods demonstrate the change in their positional power during the peace-building cycle (Table 3).

INSERT TABLE 3 HERE

War period

During this socio-historic period, the central actors in terms of positive exchanges (the highest Bonacich score) were P1; P7; S2; M1; M2 (Table 3). They belonged to the Bosnian Croat politico-military elite. Their exchanges with the core actors and other network members were conducted through the activities to mobilize Bosnian Croats for the war effort. The central institution in charge of those activities was the Croatian Defense Council (HVO), which was set up as a combined civilian and military structure and acted as the highest authority in the Bosnian Croat majority areas of Bosnia and Herzegovina. In the context of all-out mobilization for war, group solidarity, loyalty, trust, and mutual obligation in upholding the network's common cause of protecting Bosnian Croat interests held the network together and ensured its cohesiveness. For this period, the distinction between coreness and centrality is analytically irrelevant, which is why we do not discuss central actors identified according to their positive Bonacich centrality scores in this period.

Post-war institution-building

In the immediate post-war period, when the political and economic context in Bosnia and Herzegovina changed, particularly the access to funding through the war economy, the network focused on securing its economic base through alternative means. This entailed using the HVO's funds (comprised of allocations from the budgets of Bosnia and Herzegovina Federation and the Republic of Croatia) to set up companies and purchase company shares in the Bosnian Croat majority areas, taking advantage of emerging opportunities opened through economic liberalization and privatization.²² Having network members in post-war political and economic institutions was instrumental in facilitating the commercial exchanges. The front company for the exchanges involving the HVO funds was a commercial bank (Bank), which served as the depositary institution for the funds of the Bosnian Croat component of the Federation Ministry of Defense. The Bank's head and the majority of its various boards' members were connected to the core of the network. The commercial loans approved by the Bank, and backed up by the HVO monies, were used to purchase shares in other companies, in which former HVO members connected to the core were appointed to management and supervisory boards (Fazlić and Mijatović 2004; Case KPV-13/04;²³ Pavić 2002; Jelinić 2003).

Subsequently, exchanges among those actors were pivotal in conducting commercial operations involving those companies that benefited the network. The central actor M8 (2.01; Table 3), was appointed head of a company that was instrumental in the transactions that afforded the network ownership in some of the most lucrative companies in Bosnia and Herzegovina at the time (in oil distribution, banking, insurance and telecommunications) and hence access to substantial economic resources. M8 owed his directorship to his connection to a core member who was his superior in the military during the war. To facilitate commercial transactions, M8 relied on his ties to a Federation Ministry of Defense employee who was also a member of supervisory and management boards of the three companies including the Bank. Thus, M8 was able to take advantage of that actor's strong connections in the government as well as in the business sector to organize complex financial transactions according to the network members' interest. M8's connection chaired the Bank's

supervisory board and had direct link to the chair of the credit committee that approved the loans.

These connections provided M8 with the information and loans to acquire shares in other companies under the network's control. Furthermore, through his connection's in the Federation Ministry of Defense, M8's company was granted contracts to supply various services to the Bosnian Croat armed forces, which afforded it a privileged market position and, by extension, strengthened interests in the network's preservation (Malić 2005; NA 2010;²⁴ Đuričić 2006; Šoštarić 2004).

The planning and implementation of complex inter-linked transactions including company shares acquisition, shares swaps, debt swaps, and fictitious supplier contracts to the HVO, which sustained the network's economic base, relied on mutual trust and commitment among the actors involved in this collaboration. Likewise, mutual trust and commitment were important in concealing irregularities in the use of public money through the exchanges among the network members that, if detected by international authorities overseeing the peace-building process in Bosnia and Herzegovina, could have led to disruption in the network and potentially to its dissolution.

Institutional consolidation

When the international community stepped up its engagement in institutional consolidation to further the peace-building process, the network's objectives shifted toward reasserting openly its political influence through a self-rule. The shift was prompted by the loss of elections by the Croatian Democratic Union of Bosnia and Herzegovina (HDZBiH) and its parent party HDZ in Bosnia and Herzegovina and Croatia, respectively. A new government in Croatia pledged to reduce financial support to Bosnian Croats and to increase transparency around the support it did give. Implementation of the self-rule involved the withdrawal of Bosnian Croat staff from all Federation government offices and from the Federation armed forces, and the provision of funding. The prominent central actor E1 (1.86; Table 3) was a Federation government official whose connections to the core actors and their connections in the public, commercial and non-state institutions, facilitated exchanges among network members supporting the self-rule project. Through those connections, funds from the Federation

Ministry of Defense budget were transferred to the Ministry's branch office in the town of Mostar—the proclaimed seat of Bosnian Croat self-rule (Bećiragić 2001; Jukić 2001; Case KT 291/04²⁵). The Mostar office employed former Croatian Defense Council staff, some of whom interacted with E1 as a Ministry official, while some others had connections to the core network members, so that through those webs of connections a further chain of exchanges was enabled. Those exchanges involved cash payments through the Mostar office to individuals and various organizations in civil society, religious institutions and local authorities connected to E1 and his connection's connections, using money from the Federation Defense Ministry budget (Mijatović 2005; Case KPŽ-21/04²⁶). To illustrate, during E1's term in office, three Bosnian Croat municipal governments received cash payments which they used to purchase shares in the companies in which actors connected to E1's connections and to E1 himself were the directors or board members. The three government heads were connected to the core members through their service in the wartime HVO structures, their interactions as government officials, or their exchanges as board members of companies linked to the network. Those three municipalities covered only part of the Bosnian Croat majority areas but were of strategic importance to the Bosnian Croat autonomy project, and hence for the network's preservation, which testifies to the politics driving E1's exchanges. The example of S2 (1.49; Table 3), a head of a civil society organization whose members were war veterans, is another illustration of the political motive behind network members' interactions. S2, who served as a high-ranking official during the war, owed his influence to having strong connections to the core members, and to actors in civil society and commercial sphere. War veterans were influential lobbyists for Bosnian Croat self-rule and obstructed international peace-building efforts, including by violent protests and attacks on returning refugees (Jelinić 2003; Pavić 2002; NA 2004²⁷). Through S2's connections, multiple debt and share swaps among companies and local governments were performed to raise funding for his organization. Those funds financed activities supporting Bosnian Croats indicted for war crimes by the International Criminal Tribunal for War Crimes in the Former Yugoslavia. For the network's core, keeping the issue of Bosnian Croat war crime indictments at the forefront of political action served to rekindle a sense of Bosnian Croat unity in support for the Bosnian Croat autonomy project, and as an important affective resource (Pavić

2002). S2 would eventually use his influence and authority derived from his connections in the political, economic, and civil society strata of Bosnian Croat society to try to position his organization as the key force in the destruction of the politico-administrative set-up of the Federation of Bosnia and Herzegovina in which network members actively participated (Pavić *ibid*).

These results provide evidence of a shifting distribution of power within the network in different stages along war-to-peace trajectory. Besides dense ties among the core actors forged during the war, other actors in different segments of Bosnian Croat society became influential by using their connections to pursue exchanges that benefited a wide spectrum of actors, enhancing network cohesiveness. Using their politico-economic links to take advantage of the opportunities under the economic and governance reforms implemented in post-war Bosnia and Herzegovina, the opportunistic collaboration those central actors facilitated, helped steer the commercial activities in some of the major companies according to their interests. In this way, the network strengthened its economic clout as well as secured political capital needed for its survival throughout peace-building process.

Internal rivalry: Bargaining and Brokerage

Having analyzed the distribution of relational power essential for maintaining the network through positive (collaborative) exchanges, we now turn to examine the rivalry among the network members to draw benefits from connecting peripheral actors. As evident from the results presented in Table 4, in each period different actors were able to leverage the information available through their connections to arbitrate among the actors seeking access to the opportunities available to the network members, which demonstrates a profoundly political dynamics in network longevity.

INSERT TABLE 4 HERE

War period

In the war period P1 (Bonacich negative centrality 2.59; betweenness (9.97); Table 4) owed his capacity to broker relations between more peripheral actors and the network core, and among peripheral actors themselves, to his connections as a top official in the Croatian Defense Council (HVO). His dual political-military role enabled P1 to act as a focal point in control of crucial information concerning political, security, and socio-economic developments in the Bosnian Croat majority areas, which he used in linking selectively less-connected network actors. He exerted influence over appointments in all main institutions set up in the parts of Bosnia and Herzegovina within the imagined Bosnian Croat state. Having access to P1 was indispensable for key appointments in Bosnian Croat wartime institutions, public company management structures, higher education, hospital directorship, and so on. This made him an influential actor when arbitrating who to include in the implementation of interlinked exchanges to extract resources (financial, symbolic, economic goods and services, provision of information), implement political directives, and conduct military affairs, and to facilitate those actors' inter-connections (Karup-Druško 2010). Considered by some as the 'mastermind' behind the creation of war-time Bosnian Croats para-state (Suljagić 2002), P1 benefited personally from exchanges with some of those less-connected actors in running his own lucrative oil business.

Post-war institution building

In this period, several actors who joined the network in a military capacity during the war and subsequently became public and commercial actors were able to use their connections to act as brokers among weakly connected network members and exploit entrepreneurial opportunities in the business sector. M3 (1.94 (9.3); Table 4) headed a company that served to conceal irregularities in financial transactions involving a major insurance company which in turn was implicated in dubious financial transactions that the network members facilitated. The insurance company, established by the Bank, provided services to the Bosnian Croat armed forces and a string of business and public entities in Bosnian Croat majority areas. The connection between the insurance company director and M3 was instrumental in transferring the insurer's shares in another company to M3's company. M3 possessed

information and a right kind of connections to facilitate the complex set of transactions involving those shares which prevented a collapse of the elaborate system of financial operations run by the network. M3's strategic brokering position yielded personal benefits; through the transactions with the insurance company, the company he headed indirectly acquired shares in the insurance company and the Bank, the two of the most lucrative businesses at the time. M3 subsequently set up his own company, which owing to M3's connections gained access to commercial opportunities in the Bosnia and Herzegovina's expanding post-war private sector (AIM 2001).

Institutional consolidation

During the period of institutional consolidation mandated by the Dayton Peace Agreement, when the network focused on the mobilization of material and symbolic support from broad sections of Bosnian Croat society to establish self-rule institutions, it was important to get a backing from the Catholic Church, educational institutions, and civil society organizations. Consequently, this created entrepreneurial opportunities for actors with the connections in those societal domains, from which they were able to benefit personally while facilitating transactions among the less-connected actors. P7's (1.67(4.5); Table 4) played a brokering role thanks to his connections throughout Bosnian Croat society in his past roles in the Bosnian Croat political and governance structures. P7's connections facilitated Franciscan province's acquisition of company shares, including in the banking and insurance sector, as well as secured preferential contracts with public and commercial entities in the Bosnian Croat majority areas for the printing press owned by the Franciscan order. Purchasing company shares enabled the Catholic Church to benefit economically from participation in the business dealings among companies, public institutions, and civil society through connections facilitated by P7 (Mijatović 2004). While the Catholic Church openly supported Bosnian Croat politico-military leadership since the onset of war, benefiting economically from the network activities served to reinforce the incentives and hence the Church's support for the self-rule initiative.

P7 was also directly involved in fund-raising schemes in support of the self-rule (Case KPV-14/04 2004²⁸). For example, through P7's ties to local government and civil society actors, a financial donation from one of the companies for the salaries of the HVO soldiers who defected from the Federation Army as part of the self-rule project was arranged alongside a donation to an endowment fund the Franciscan order set up in support of Bosnian Croat self-rule government structures (Case KPV-13/04²⁹). Company directors' and civil society organizations' dependence on connections to P7 for access to the network's commercial activities was a significant factor in his successful solicitation of donations. P7's connections in the Federation Ministry of Defense, in the Bank's supervisory board (of which he was a member), and in the companies the Bank co-owned or had as clients, facilitated transactions that required exchanges between local government, companies, and civil society organizations (Case KPV-13/04³⁰). P7 benefited from his brokering power including a personal payment from one of the companies involved in transactions he facilitated through his connections (Đuričić 2006).

The analysis based on the Bonacich negative attenuation factor and betweenness demonstrates bargaining dynamics within the network, as some actors were able to exploit opportunities which were created by a shift in dominant exchanges—from military to commercial and political—during the transition from war to peace to enhance their status and influence. While pursuing the network's common purpose of Bosnian Croat political autonomy, various peripheral actors in the Bosnian Croat network (illustrated by the examples of P1; M3; P7) whose connections cut across political, economic and societal scales were able to benefit personally by exploiting other actors' dependence on them for access to the opportunities and benefits derived from the network's control of commercial flows and from its political influence in the Bosnian Croat majority areas. Despite uneven distribution of benefits conferred by the network's fragmented structure and the rivalry among the co-ethnics, those actors who emerged as local power holders, played a role in maintaining the network.

Conclusion

In this article we align the relational turn in the liberal peace-building literature with a methodology that enables examination of the network's structural properties by studying patterns of relations and their change over time, to offer a structural explanation of the persistence of informal networks from war to peace. Taking relations as a unit of analysis helps further understanding of how informal networks work. This perspective is missing in categorical analyses of networks in the peace-building scholarship grounded in the assumptions of fixed identities, boundaries and choices actors make and of power as 'hierarchical, pre-given and enacted according to formal and unambiguous rules' (Talmud and Mishal 2000:176). The application of Social Network Analysis allowed us to verify empirically that an informal network persists from war to peace and to gain insight into its changing structure. A political approach to networks has revealed *how* strategic coalitions and opportunistic collaboration through network connections enabled network members to take advantage of emerging opportunities in the peace-building process thus preserving a degree of network cohesion that also yields private benefits to its members. We show that a post-conflict informal network is fragmented and adaptable, rather than a stable structure held together by solidarity and shared loyalty of its members, as misconstrued by culturalist and rational-individualist perspectives on network persistence.

Our analysis of the Bosnian Croat network shows that relations within an informal ethnic network are constantly rearticulated. The network's core remains stable over time while the remaining structure changes as the peace-building process introduces new norms, institutions, and rules, providing opportunities to non-core members from different societal spheres and endowed with right types of connections, to become more influential and active in maintaining the network. The reconfiguration of relations among the network members makes some actors more powerful than others. In each period, different actors other than the core members, and crucially, other than those under scrutiny of international peace-builders for malpractice, are able to exercise power and influence by drawing on connections with other actors. What these connections are - to whom and what essential resources those connections convey - determines opportunities and constraints those actors encounter in pursuit of their objectives. The network's uneven internal distribution of power understood relationally over the three periods (war; introduction of liberal institutions; institutional consolidation) is key to its

adaptability, and hence its persistence. Thus our evidence demonstrates that the transformation of the network structure occurs despite the ‘stickiness’ of ties based on kinship or other ascriptive ties (Eilstrup-Sangiovanni and Jones 2008: 6), which are a common feature of clandestine informal networks encountered in peace-building.

Our study contributes to the debate on informal networks in peace-building analytically and empirically. By widening the analytical lens beyond observable actors and relations, it helps identify key actors who yield their power based on the structure of their relations to other actors and play a role in stabilizing the network over time, including a range of social strategies they use in different historical contexts. The relational analysis shows how the phenomena of institutional transgression attributed to the agency of informal networks which undergirds informal practice, and the symbiosis of political-commercial and military elites, occur on the ground; and how what Jansen (2015: 208) calls this ‘meshing’ contributes to pervasive and sustained informality in conflict-affected societies such as Bosnia and Herzegovina.

Having conducted a single case-study, here we make a claim only to ‘contingent generalizations that apply to a subclass of cases that are similar to those under study [...]’ (George and Bennett 2005: 33). This limitation has been considered in the process of selection of a Bosnian Croat network as a typical case of informal network persistence, which allowed us to use the relational information to test the existing explanations of this phenomenon (Wasserman and Faust 1994: 21). We, therefore, expect that a network structure will hold the answer to the question of persistence of informal networks in other geographic contexts. Our theoretical contribution, based on a consistent application of a relational perspective without reducing a network to static properties of individual nodes (Hafner-Burton et al 2009: 581), has policy implications.³¹ Studying relations between network members provides a different perspective on the obstacles to liberal peace-building and the shortcomings of the existing policy instruments for tackling informality.

In policy practice, the international responses to persistent informality have been constrained by siloed and disjointed interventions focused on building market and political institutions, and strengthening

legal and regulatory frameworks in conflict-affected countries. To counteract informal networks, international interveners have focused on identifying ‘powerful’ actors according to their institutional and organizational roles at the expense of understanding relational dynamics which determines what an actor can or cannot do. Such understanding of informal networks is poor guide for policy practice as it underestimates complex ways in which politics, economy, and ideology mix in countries emerging from protracted armed conflicts. As Kleibrink (2015) suggests, locating power in perturbed and fluid contexts, such as in post-conflict countries, is an empirical question. Hence favoring legal instruments and capacity building approaches is bound to fail (Gordy 2018:7). What is needed is a change in the frame of understanding informality that can capture a wider range of social relations. Networks are dynamic arrangements in which relations between members define the ability of different members to take advantage of opportunities, broadly understood as commercial and political incentives, that emerge within the peace-building process and by-pass constraints imposed by the international political and economic institutional reforms. Scrutinizing how network members use their connections to mobilize requisite instrumental (economic, political) and expressive (loyalty, solidarity) services and resources is indispensable in crafting more effective strategies to combat informal networks. A consequence of overlooking relational power (and its different modalities) in designing policy response has been that even when ‘a spider leaves, the web remains.’³² Ultimately, informality attributed to informal networks in peace-building is more aptly described as a manifestation of a particular social condition that requires comprehensive responses to establish alternative material, institutional and ideational basis of post-conflict society that would reduce incentives to informality and increase its costs for those involved.

¹ While the former leads to a normative study of multi-actor entities as delegated agents, the latter focuses the empirical study on opportunities and constraints residing in the relations between network members (Kahler 2009).

² Conversely, factionalism in the ethnic body politic that is observable ought not to assume the discontinuity of all connections between members of different factions, which also requires empirical verification.

³ For example, in the Bosnian Croat case, scholars detail the continuity of actors who are prominent actors both in the conflict and the post-conflict phase (Zdeb 2016; Grandits 2007). However, public prominence of these individuals does not attest to the existence of ties with other actors, or to the durability of those ties from war to peace.

⁴ The concept has been criticized for its lack of precision in capturing locally specific manifestations (Hale 2011; Mkandawire 2015; Auyero et al 2009; Ilkhamov 2007; Semenova 2018), and its narrow understanding as a transactional phenomenon (Piliavsky 2014).

⁵ According to Jackson and Nelson (1999), focusing on interaction among actors and its effects, allows us to imagine that a process is mutable in space and time, as are the mechanisms to promote it.

⁶ This is explicitly demonstrated by the anthropological studies, e.g. Piliavsky (2014) and Meagher (2005).

⁷ However, this claim, too, has not been put to the empirical test by analyzing network ties.

⁸ On the periodization of the war-to peace continuum, see: Ghani and Lockhart (2008), Paris (2004), Doyle and Sambanis (2006).

⁹ On the support of the Bosnian Croat autonomy project in Grude and several other towns in Western Herzegovina, see: Grandits (2007). This support was manifested vividly during the events surrounding the raid of the Hercegovačka Banka offices by SFOR troops on 6 April 2001 in those towns, Grude included. A group of around 1,000 Grude citizens, led by local war veterans, clashed with SFOR soldiers, in the attempt to prevent the search of the Bank's local office, wounding one of SFOR soldiers and holding hostage some ten of them for several hours. Three vehicles belonging to SFOR

and Bosnia and Herzegovina Federation Ministry of Interior were damaged during the riots, the main transport routes in and out of the city were blocked, and local schools closed. Source: [https://www.grude-online.info/16-godina-od- "terorističkog"- napada- jajima- na- SFOR- u- Grudama/](https://www.grude-online.info/16-godina-od-teroristickog-napada-jajima-na-SFOR-u-Grudama/)

¹⁰ These are: Banke u Bosni i Hercegovini, *Dani*, *Dnevni avaz*, *Dnevni list*, *Feral tribune*, *Global*, *Globus*, *Infokom*, *Jutarnji list*, *Ljiljan*, *Nacional*, *Nezavisne novine*, *Oslobodjenje*, *Reporter*, *Slobodna Bosna*, *Slobodna Dalmacija*, *Start*, *Večernji list*, and internet portals: index.hr, bhmagazin.com and aim.org.

¹¹ A number of these interviews were repeated two or three times to verify and follow up on information as it emerged during the research process.

¹² In establishing network boundaries and limiting the number of actors to 36 was ultimately guided by judgement sampling (Acedo et al 2006).

¹³ However, we should note that density figures here are included for descriptive purposes. To make inferences about how the changing nature of exchanges affects the network characteristics in terms of power relations, we need to consult centrality measures.

¹⁴ According to Foster (1979), the structural transformation inside the networks is a result of internal power dynamics.

¹⁵ Network analysts have traditionally associated power with centrality measures because more central actors can obtain better bargains in exchanges, access and disseminate information, and connect to others (Hafner-Burton et al 2009; Hanneman and Riddle 2005).

¹⁶ Modelled with an 'attenuation factor (B)' with positive values (between 0 and 1), while higher scores in absolute value reflect an actor's network wide influence from having many and right kind of connections (Bonacich 1987).

¹⁷ Modelled with an 'attenuation factor (B)' with negative values (between 0 and -1), while centrality scores reflect power a network member derives from connecting actors dependent on him (Bonacich 1987).

¹⁸ We used UCINET SNA software to calculate network measures (Borgatti, Everett, and Freeman 2002). For ethical reasons we anonymized the data presented in tables 2-4. The coding was done according to an individual's primary affiliation: M-military; P-civilian government; E-economic; S-civil society.

¹⁹ The selected nodes differ for each SNA measure. Among actors with similar scores, we select those that best illustrate a given dynamic.

²⁰ www.sudbih.gov.ba/files/docs/presude/2005/Jelavic_ENG_KPV_10_04.pdf. (10 January, 2016).

²¹ See, for example: Duffield (2002b); King (2001); Berdal (2009); Andreas (2004); Le Billon (2012); Jung (2008).

²² The HVO armed force was formally integrated into Bosnia and Herzegovina Federation Defense structures and funded by public revenue raised in Bosnia and Herzegovina and by donations from Croatia.

²³ www.sudbih.gov.ba/files/docs/presude/2004/Prce_ENG_KPV_13_04.pdf.

(10 January, 2016).

²⁴ 'Tajni računi za pljačku državnog proračuna', www.bhmagazin.com/bih/2296-aferra-hercegovacka-banka-tajni-racuni-za-pljacku (23 June, 2017).

²⁵ <http://www.slobodanpraljak.com/MATERIJALI/SVJEDOCI/BATINIC%20ZDRAVKO?65.pdf> (15 March, 2016).

²⁶ <http://www.tuzilastvobih.gov.ba/?opcija=presude&godina=2004&odjel=2&jezik=h>. (20 May, 2016).

²⁷ Sudjenje akterima hrvatske samouprave. <http://www.index.hr/vijesti/clanak/sudjenje-akterima-hrvatske-samouprave-u-bih-krajem-godine/223013.aspx?mobile=false> (20 February, 2017).

²⁸ <http://www.tuzilastvobih.gov.ba/?opcija=presude&godina=2004&odjel=2&jezik=h>. (10 January, 2016).

²⁹ www.sudbih.gov.ba/files/docs/presude/2004/Prce_ENG_KPV_13_04.pdf.

(15 January, 2016).

³⁰ Ibid.

³¹ Also, for a discussion of research methods and the study of peace, with a particular focus on state-building, see Woodward et al 2012.

³² We credit our colleague Nathaniel Olin for this quote.

References

- Acedo, Francisco.J., Barroso, Carmen, Casanueva, Christóbal and Galán, José.L. (2006) Co-Authorship in Management and Organizational Studies: An Empirical and Network Analysis, *Journal of Management Studies*, 43: 957-983
- AIM (2001) 'Zlatni računi nepostojećih firmi' (18 December).
- Alley, Roderic (2015) 'Regimes that Obstruct: A Problem of Institutional Refurbishment Following Internal Conflict', *Journal of Intervention and Statebuilding* 9(1): 112-133.
- Andreas, Peter (2004) 'The Clandestine Political Economy of War and Peace in Bosnia', *International Studies Quarterly* 48: 29-51.
- Autesserre, Severin (2014) *Peaceland: Conflict Resolution and the Everyday Politics of International Intervention*, Cambridge: Cambridge University Press.
- Ayero, Javier, Lapegna, Pablo and Page Poma, Fernando (2009) 'Patronage Politics and Contentious Action: A Recursive Relationship', *Latin American Politics and Society* 51(3):1-31.

Barma, Naazneen H. (2017) *The Peace-building Puzzle: Political Order in Post-Conflict States*,
Cambridge: Cambridge University Press.

Basu, Aparna (2014) 'Social Network Analysis: A Methodology for Studying 'Terrorism' in
Mrutyunjaya Panda, Satchidananda Dehuri and Gi-Nam Wang, eds. *Social Networking:
Mining, Visualization, and Security*, 215-242, --Springer.

Bećiragić, Sanjin (2001) 'Hercegovci bježe iz vojske', *Dani* (23 March).

Belloni, Roberto and Francesco Strazzari (2014) 'Corruption in Post-conflict Bosnia-Herzegovina: A
Deal Among Friends', *Third World Quarterly* 35(5):855-871.

Berdal, Mats (2009) *Building Peace after War*. Abingdon: Routledge.

Bignami-Van Assche, Simona (2005) 'Network Stability in Longitudinal Data: A Case Study from Rural
Malawi', *Social Networks* 27(3):231-247.

Bojicic- Dzelilovic, Vesna (2006) 'Peace on Whose Terms? War Veterans' Associations in Bosnia-
Herzegovina' in Edward Newman and Oliver .Richmond , eds., *Challenges to Peacebuilding:
Managing Spoilers During Conflict Resolution*, 200-219, Tokyo: UNU Press.

Bojicic-Dzelilovic, Vesna and Denisa Kostovicova (2012) 'Locating Power in State-Building: The Conflict Network
Perspective', *Südosteuropa* 2012, 60(4): 591-602.

Bonacich, Phillip (1987) 'Power and Centrality: A Family of Measures', *American Journal of
Sociology* 92(5):1170-1182.

Borgatti, Stephen P. and Martin G. Everett (2000) 'Models of Core/Periphery Structures', *Social
Networks* 21:375–395.

Börzel, Tanja A. and Thomas Risse (2015) 'Dysfunctional State Institutions, Trust, and Governance in
Areas of Limited Statehood', *Regulation and Governance* 10:2149-2160.

-
- Brković, Čarna (2016) 'Flexibility of *Veze/Štele*: Negotiating Social Protection' in Stef Jansen, Čarna Brković, and Vanja Čelebičić, eds., *Negotiating Social Relations in Bosnia and Herzegovina: Semiperipheral Entanglements*, 94-108. New York and London: Routledge.
- Budescu, David V (2006) 'Confidence in Aggregation of Opinions from Multiple Sources in Fiedler, Klaus and Juslin, Peter eds., *Information Sampling and Adaptive Cognition*, 327-354, Cambridge: Cambridge University Press.
- Büscher, Karen, (2012) 'Urban Governance Beyond the State: Practices of Informal Urban Regulation in the City of Goma, Eastern D.R. Congo', *Urban Forum* 23(4):483– 499.
- Burt, Ronald J. and Nan Lin (1977) 'Network Time Series from Archival Records', *Sociological Methodology* 8: 224-254.
- Carayannis, Tatiana (2003) 'The Complex Wars of the Congo: Towards a New Analytic Approach', *Journal of Asian and African Studies* 38(2-3):232-255.
- Carayannis, Tatiana, Vlassenroot, Koen, Hoffmann, Kasper and Aaron Pangburn (2018) *Competing Networks and Political Order in the DRC: A Literature Review on the Logics of Public Authority and International Intervention*, London: The London School of Economics and Political Science.
- Chayes, Sarah (2015) *Thieves of States: Why Corruption Threatens Global Security*, New York and London: W.W. Norton & Company.
- Cheng, Cristine S. and Dominik Zaum, eds (2012) *Corruption and Post-conflict Peace-building: Selling the Peace?*, Abingdon: Routledge.
- Christia, Fotini (2008) 'Following the Money: Muslim versus Muslim in Bosnia's Civil War', *Comparative Politics* 40(4):461-480.
- Cook, Karen S., Emerson Richard M., Gilmore Mary R and Toshio Yamagishi (1983) 'The Distribution of Power in Exchange Networks: Theory and Experimental Results', *American Journal of Sociology* 89(2):275-305.

-
- Cook, Karen and Joseph Whitmeyer (1992) 'Two Approaches to Social Structure: Exchange Theory and Network Analysis', *Annual Review of Sociology* 18:109-127.
- Cox, Michaelene (2009) *Social Capital and Peace-building: Creating and Restoring Conflict with Trust and Social Networks*, London: Routledge.
- Donais, Timothy (2005) *The Political Economy of Peace-building in Post-Dayton Bosnia*, London and New York: Routledge.
- Doyle, Michael W and Nicholas Sambanis (2006) *Making War and Building Peace: United Nations Operations*. Princeton: Princeton University Press.
- Duffield, Mark (2002a) 'Social Reconstruction and the Radicalization of Development', *Development and Change* 33(5):1049-1071.
- Duffield, Mark (2002b) *War as a Network Enterprise: The New Security Terrain and its Implications*, *Cultural Values* 6(1-2):153-165
- Dziedzic, Michael ed. (2016) *Criminalized Power Structures: The Overlooked Enemies of Peace*, Lanham, MD: Rowman and Littlefield.
- Dziedzic, Michael, Rozen Laura and Phil William (2002) *Lawless Rule versus Rule of Law in the Balkans*, Washington: USIP Special Report.
- Đuričić, Vuk (2006) 'Kako su hrvatski građani obogatili HDZ-ovu elitu', *Slobodna Dalmacija* (26 March).
- Eaton, Tim et al (2019) *Conflict Economies in the Middle East and North Africa*. London: Chatham House.
- Efendić, Adnan, Pugh Geoff and Nick Adnett (2011) 'Confidence in Formal Institutions and Reliance on Informal Institutions in Bosnia-Herzegovina: An Empirical Investigation Using Survey Data', *Economics of Transition* 19(3):521-540.
- Eilstrup-Sangiovanni, Mette and Jones Calvert (2008) 'Assessing the Dangers of Illicit Networks: Why al-Qaida May Be Less Threatening Than Many Think', *International Security* 33(2):7-44.

-
- Fazlić, Mirsad and Suzana Mijatović (2004) 'Jelavićeva grupa tereti se da je nezakonito potrošila 216 miliona maraka koje je Hrvatska uplaćivala Hrvatima u BiH', Slobodna Bosna (29 January).
- Feige, Edgar and Katarina Ott, eds. (1999) *Underground Economies in Transition: Unrecorded Activity, Tax Evasion, Corruption and Organized Crime*, Aldershot Hants: Edgar Elgar.
- Foster, Brian L. (1978-1979) 'Formal Network Studies and the Anthropological Perspective', *Social Networks* 1(3):241-255.
- Fuji Lee, Ann (2008) 'The Power of Local Ties: Popular Participation in the Rwandan Genocide', *Security Studies* 17(3):568-597.
- Gerring, John (2008) 'Case Selection for Case-study Analysis: Qualitative and Quantitative Techniques' in Box-Steffensmeier, Janet M., Brady Henry E. and Collier David, eds. *The Oxford Handbook of Political Methodology*, 645-685, Oxford: Oxford University Press.
- George, Alexander L. and Andrew Bennett (2005) *Case Studies and Theory Development in the Social Sciences*, Cambridge, M.A.:MIT Press.
- Ghani, Ashraf and Claire Lockhart (2008) *Fixing Failed States: A Framework for Rebuilding a Fractured World*, Oxford: Oxford University Press.
- Goldsmith, Andrew and Georgia Lysaght (2012) *Illicit Networks Workshop, Crime, Law and Social Change*, 57:123–127.
- Gordy, Eric (2018) 'Gaps between Formal and Informal Practices in Southeast European States', *Regional Studies of Russia, Eastern Europe and Central Asia* 7(12):3-8.
- Grandits, Hannes (2007) 'The Power of 'Armchair Politicians': Ethnic Loyalty and Political Factionalism among Herzegovinian Croats' in. Xavier Bougarel, Elissa Helms and Gerd Dujizings eds. *The New Bosnian Mosaic, Identities, Memories and Moral Claims in a Post-war Society*, 101-123, Ashgate: Aldershot

-
- Granovetter, Mark (1973) 'The Strength of Weak Ties', *The American Journal of Sociology* 78(6):1360-1380.
- Granovetter, Mark (1985) 'Economic Action and Social Structure: The Problem of Embeddedness', *American Journal of Sociology* 91(3):481-510.
- Hafner-Burton, Emilie, Kahler Miles and Alexander H. Montgomery (2009) 'Network Analysis for International Relations', *International Organization* 63:559-592.
- Hale, Henry (2011) 'Formal Constitutions in Informal Politics: Institutions and Democratization in Post-Soviet Eurasia', *World Politics* 63(4):581-617.
- Hanneman, Robert A. and Mark Riddle (2005) *Introduction to Social Network Methods*, Riverside CA: University of California.
- Harkness, Kristen A. (2016) 'The Ethnic Army and the State: Explaining Coup Traps and the Difficulties of Democratization in Africa', *Journal of Conflict Resolution* 60(4):587-616.
- Harvey, Nigel, Bolger, Fergus and Alastair McClelland (1994) 'On the Nature of Expectations', *British Journal of Psychology* 85: 203-230.
- Helfstein, Scott and Dominick Wright (2011) 'Covert or Convenient? Evolution of Terror Attack Networks', *Journal of Conflict Resolution* 55(5): 785-813.
- Heupel, Monika (2006) 'Shadow Trade War Economies and their Challenge to Peace-building', *Journal of International Relations and Development* 9(2):140-169.
- Jackson, Patrick and Daniel Nexon (1999) 'Relations before States: Substances, Processes and the Study of Politics', *European Journal of International Relations* 5(3):291-332.
- Jackson, Patrick and Daniel Nexon (2019) 'Reclaiming the Social: Relationalism in Anglophone International Studies', *Cambridge Review of International Affairs* 32(5):592-600.
- Jansen, Stef (2015) *Yearnings in the Meantime: 'Normal Lives' and the State in a Sarajevo Apartment Complex*, New York and Oxford: Berghahn.

-
- Jelinić, Berislav (2003) 'Hercegovački Franjevci su sudjelovali u otimačini novca iz hrvatskog proračuna', Nacional (2 May).
- Ilkhamov, Alisher (2007) 'Neopatrimonialism, Interest Groups and Patronage Networks: The Impasses of the Governance System in Uzbekistan', Central Asian Survey 26(1):65-84.
- Jones, Lee (2010) '(Post)-colonial State-building and State Failure in East Timor: Bringing Social Conflict Back In', Conflict, Security and Development 10(4):547-575.
- Jukić, Želimir (2001) 'Kraj hrvatske samouprave', AIM (15 November).
- Jung, Dietrich, ed. (2003) Shadow Globalization, Ethnic Conflicts and New Wars: A Political Economy of Intra-state Wars, Routledge: London and New York.
- Kahler, Miles (2009) 'Networked Politics: Agency, Power, and Governance', in Kahler Miles, ed. Networked Politics: Agency, Power and Governance, 1-20, Ithaca and London: Cornell University Press.
- Kaldor, Mary (1999) New and Old Wars: Organized Violence in a Global Era, Oxford: Polity Press.
- Kapferer, Bruce (1969) 'Norms and the Manipulation of Relationships in a Work Context' in Mitchell Clyde, ed., Social Networks in Urban Situations: Analysis of Personal Relationships in Central African Towns, 181-245, Manchester: Manchester University Press.
- Karup-Druško, Dženana (2005) 'Šta je članu predsjedništva pola miliona maraka', Dani (14 October).
- Karup-Druško, Dženana (2010) 'Spavači u registru branitelja', Dani (16 April).
- Kleibrink, Alexander (2015) Political Elites and Decentralization Reforms in the Post-socialist Balkans-Regional Patronage Networks in Croatia and Serbia, Houndmills Basingstoke: Palgrave Macmillan.
- Kilavuz, Idil (2009) 'The Role of Networks in Tajikistan's Civil War: Network Activation and Violence Specialists', The Journal of Nationalism and Ethnicity 37(5):693-717.

Kim, Hyejin (2010) *International Ethnic Networks and Intra-Ethnic Conflict: Koreans in China*, New York: Palgrave Macmillan.

King, Charles (2001) 'The Benefits of Ethnic War: Understanding Eurasia's Unrecognized States', *World Politics* 53(4):524-552.

Kingston, Paul and Ian S. Spears (2004) *States-within-States: Incipient Political Entities in the Post-Cold War Era*, New York and Basingstoke: Palgrave Macmillan.

Knoke, David and Ronald S. Burt (1983) 'Prominence' in Burt Ronald and Minor Michael, eds., *Applied Network Analysis*, 195-222, Beverly Hills: Sage.

Krackhardt, David (1992) 'The Strength of Strong Ties: The Importance of Philos in Organizations' in Nohria, Nitin and Eccles Robert G. eds., *Networks and Organizations: Structure, Form, and Action*, 216-239, Boston, Mass: Harvard Business School Press.

Kurtenbach, Sabine (2010) 'Why is Liberal Peace-building Difficult? Some Lessons from Latin America', *European Review of American and Caribbean Studies* 88:95-110.

Lake, David A. and Wendy H. Wong (2009) 'The Politics of Networks: Interests, Power, and Human Rights Norms' in Kahler Miles, ed., *Networked Politics: Agency, Power and Governance*, 127-151, Ithaca and London: Cornell University Press.

Le Billon, Philippe (2012) *Wars of Plunder: Conflicts, Profits and the Politics of Resources*. New York: Columbia University Press.

Mac Ginty, Robert (2011) *International Peace-building and Local Resistance: Hybrid Forms of Peace*, Basingstoke: Palgrave Macmillan.

Mac Ginty, Robert and Oliver P. Richmond (2013) 'The Local Turn in Peace building: A Critical Agenda for Peace', *Third World Quarterly* 34(5): 763-783.

Maley, William (2013) 'Statebuilding in Afghanistan: Challenges and Pathologies', *Central Asian Survey* 32(3):255-270.

Malić, Gordan (2001) 'Ko su najmoćniji Hrvati', *Dani* (13April).

-
- Malić, Gordan (2005) 'HDZ-ov hercegovački holding: Teškom mehanizacijom do lake zarade', Dani (14 October).
- McDoom, Omar S. (2014) 'Antisocial Capital: A Profile of Rwandan Genocide Perpetrators' Social Networks', *Journal of Conflict Resolution* 58(5):865-893.
- Meagher, Kate (2005) 'Social Capital or Analytical Liability: Social Networks and African Informal Economies', *Global Networks* 5(3):217-238.
- Mijatović, Suzana (2005) 'Sudjenje Jelaviću: Ko je dijelio novac', *Slobodna Bosna* (5 May).
- Mijatović, Suzana (2004) 'Fra Ivan Sevo jedan je od najutjecanijih i najbogatijih ljudi u Hercegovini', *Slobodna Bosna* (19 February).
- Mkandawire, Thandika (2015) 'Neopatrimonialism and the Political Economy of Economic Performance in Africa: Critical Reflections', *World Politics* 67(3): 563-612.
- Münkler, Herfried (2004) *The New Wars*, Cambridge: Polity.
- Nitzschke, Heiko and Kaysie Studdard (2005) 'The Legacies of War Economies: Challenges and Options for Peacemaking and Peace-building', *International Peacekeeping* 12(2):222-239.
- Osei, Anja (2015) 'Elites and Democracy in Ghana: A Social Network Approach', *African Affairs* 114(457):529-554.
- Padget, John F. and Christopher K. Ansell (1993) 'Robust Action and the Rise of the Medici, 1400-1434', *American Journal of Sociology* 98(6): 1259-1319.
- Palma, Oscar (2015) 'Transnational Networks of Insurgency and Crime: Explaining the Spread of Commercial Insurgencies Beyond State Borders', *Small Wars and Insurgencies* 26(3):476-496.
- Paris, Roland (2004) *At War's End: Building Peace after War*. Cambridge: Cambridge University Press.
- Pavan, Elena (2012) *Frames and Connections in the Governance of Global Communications: A Network Study of the International Governance Forums*. Lantham: Lexington Books.

Pavić, Snjezana (2002) 'Hercegovačka banka baratala isključivo novcem iz Hrvatske', Jutarnji list (19 December).

Pearlman, Wendy and Kathleen Gallagher-Cunningham (2012) 'Nonstate Actors, Fragmentation, and Conflict Processes', *Journal of Conflict Resolution* 56(1):3-15.

Peterson, Jenny H. (2015) *Building a Peace Economy? Peace-building and the Development- Security Industry*, Manchester: Manchester University Press.

Philip, Mark (2008) 'Peace-building and Corruption', *International Peacekeeping* 15(3):310-327.

Piliavsky, Anastasia ed. (2014) *Patronage as Politics in South Asia*, Cambridge: Cambridge University Press.

Pugh, Michael (2002) 'Postwar Political Economy in Bosnia and Herzegovina: The Spoils of Peace', *Global Governance* 8(4):467-482.

Raab, Jörg and Brinton H. Milward (2003) 'Dark Networks as Problems', *Journal of Public Administration Research and Theory* 13(3):413-439.

Raymeakers, Timothy (2013) 'Post-war Conflict and Market for Protection: The Challenges to Congo's Hybrid Peace', *International Peacekeeping* 20(5):600-617.

Reno, William (2007) 'Patronage Politics and the Behavior of Armed Groups', *Civil Wars* 9(4):324-342.

Reno, William (2009) 'Understanding Criminality in West African Conflicts', *International Peacekeeping* 16(1):47-61.

Semenova, Elena (2018) 'Conclusion: Do Patron-Client Relationships Affect Complex Societies' in Ledeneva Alena et al, eds, *The Global Encyclopedia of Informality*, 403-408, London: UCL Press.

Sexsmith, Kathleen (2009) 'Violent Conflict and Social Transformation: An Institutional Approach to the Role of Informal Economic Networks', *European Journal of Development Research* 21(1):81-94.

-
- Sharan, Timor (2011) 'The Dynamics of Elite Networks and Patron-client Relations in Afghanistan', *Europe-Asia Studies* 63(6):1109-1127.
- Smicek, Nick (2010) 'Conflict Networks: Collapsing the Global into the Local', *Journal of Critical Globalisation Studies* 2:9-30.
- Staniland, Paul (2012) 'Organizing Insurgency: Networks, Resources, and Rebellion in South Asia', *International Security* 37(1):142-177.
- Staub, Ervin (2013) *Positive Social Behavior and Morality: Social and Personal Influences*, London: Elsevier.
- Stewart, Rory and Gerald Knaus (2011) *Can Intervention Work?*, New York: W.W. Norton & Company, Inc.
- Stock, James H and Mark Watson (2004) 'Combination Forecasts of Output Growth in a Seven Country Data Set', *Journal of Forecasting* 22:405-430.
- Studdard, Kaysie (2004) *War Economies in a Regional Context: Overcoming the Challenges of Transformation*, Washington DC: International Peace Academy. IPA Policy Report
- Stuvøy, Kirstie (2002) 'War Economy and the Social Order of Insurgencies: Analysing the Internal Structure of UNITA's War Economy', Oslo: Norwegian University of Life Sciences.
- Suljagić, Emir (2004) 'Hrvatsko vijeće obmane', *Dani* (30 January).
- Suljagić, Emir (2002) 'Čija je Tadjmanova mapa', *Dani* (14 June).
- Šoštarić, Egon (2004) 'Ljubo Česić Rojs neće biti izručen u Bosnu, ali će mu se suditi u Hrvatskoj', *Nacional* (2 March).
- Talmud, Ilan and Shaul Mishal (2000) 'The Network State: Triangular Relations in Middle Eastern Politics', *Journal of Contemporary Sociology* 37(2):175-197.

-
- Toal, Gerard and Carl T. Dahlman (2011) *Bosnia Remade: Ethnic Cleansing and its Reversal*, Oxford: Oxford University Press.
- Wasserman, Stanley and Katherine Faust (1994) *Social Network Analysis: Methods and Applications*, Cambridge: Cambridge University Press.
- Wennmann, Achim (2009) 'Getting Armed Groups to the Table: Peace Processes, the Political Economy of Conflict and the Mediated State', *Third World Quarterly* 30(6): 1123-1138.
- Wimmer, Andreas (2013) *Ethnic Boundary Making: Institutions, Power, Networks*, New York: Oxford University Press.
- White, Kevin S. and Susan C. Watkins (2000) 'Accuracy, Stability and Reciprocity in Informal Conversational Networks in Rural Kenya', *Social Networks* 22:337–355.
- Wood, Elisabeth J. (2008) 'The Social Processes of Civil War: The Wartime Transformation of Social Networks', *The Annual Review of Political Science* 11:539-561.
- Woodward, Susan L., Kostovicova, Denisa and Vesna Bojicic-Dzelilovic (2012), 'Introduction: Methodology and the Study of State-Building in the Western Balkans', *Südosteuropa* 60(4): 469-471.
- Zdeb, Aleksandra. (2016) 'The Need to Have Something 'Of Their Own': Croat Parallel Institutions in Bosnia and Herzegovina', *Swiss Political Science Review* 22(4): 545-564.
- Yin, Robert K. (2009) *Case Study Research Design and Methods*, 4th ed. Los Angeles: Sage.

Figure 1 Bosnian Croat network from war to peace

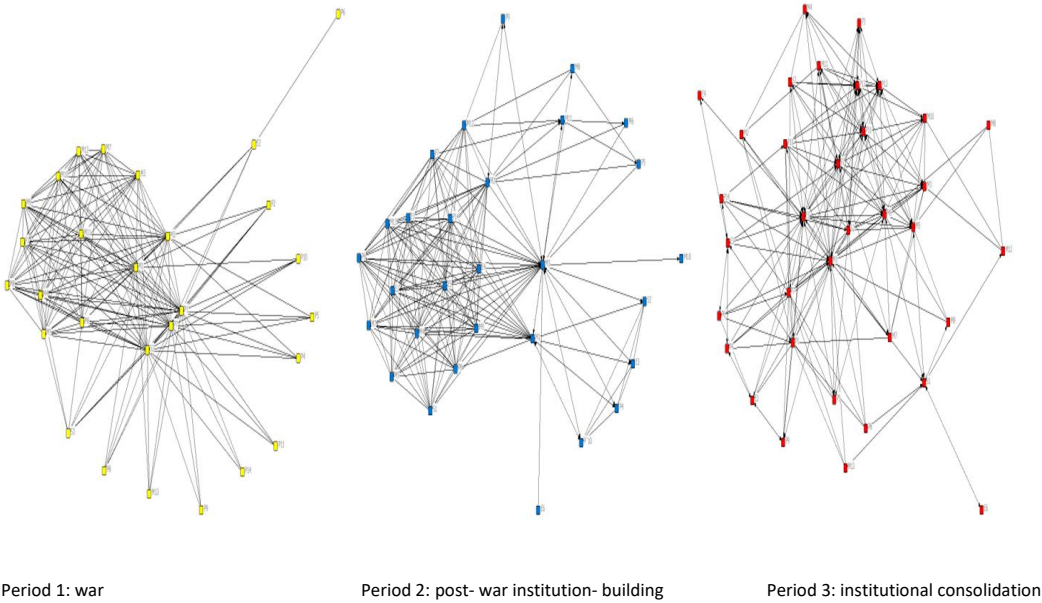


Table 1: Descriptive statistics of ties in the Bosnian Croat network

	<i>Number of ties</i>		<i>Density</i>	<i>Average degree</i>
<i>Period 1: War</i>	336	0.267		9.333
<i>Period 2: Post-war institution-building</i>	554	0.637		18.470
<i>Period 3: Institutional consolidation</i>	362	0.287		10.056

Table 2 The Bosnian Croat network: Coreness measure ³²

<i>Node</i>	<i>Period</i> <i>1</i>	<i>Period</i> <i>2</i>	<i>Period</i> <i>3</i>
<i>M2</i>	0.47	0.22	
<i>M6</i>	0.39	0.22	0.27
<i>M5</i>	0.37	0.21	0.21
<i>M1</i>	0.35	0.22	0.35
<i>M3</i>	0.30	0.22	
<i>M7</i>	0.25		
<i>M9</i>	0.21		
<i>M11</i>	0.21		
<i>M10</i>	0.20		
<i>P7</i>		0.22	
<i>M12</i>		0.22	
<i>S1</i>		0.21	
<i>E6</i>		0.21	
<i>E1</i>			0.32
<i>P2</i>			0.28
<i>S2</i>			0.25

i The table shows actors with the highest scores based on SNA analysis

Table 3 The Bosnian Croat network: Bonacich power (B+)³²

<i>Node</i>	<i>Period</i> <i>1</i>	<i>Period</i> <i>2</i>	<i>Period</i> <i>3</i>
<i>P1</i>	1.65		
<i>P7</i>	1.65	-1.45	
<i>S2</i>	1.63	-1.08	1.49
<i>P2</i>			1.64
<i>P5</i>		-1.42	
<i>M8</i>		-2.01	
<i>M11</i>		-1.97	
<i>M10</i>		-1.85	
<i>M2</i>	1.55	-1.45	
<i>M6</i>	1.41	-1.45	1.60
<i>M3</i>	1.37	-1.35	
<i>M12</i>		-1.34	
<i>M1</i>	1.55	1.35	2.00
<i>E1</i>			1.86
<i>P11</i>			1.48

ii The table includes the actors with the highest scores. Full results are reported in supplementary material

Table 4: The Bosnian Croat network: Bonacich power (B-) and betweenness (in brackets)

<i>Node</i>	<i>Period 1</i>	<i>Period 2</i>	<i>Period 3</i>
<i>P1</i>	2.59(9.97)		1.54(3.38)
<i>P7</i>	2.59(9.97)	(1.79)	1.67(4.5)
<i>S2</i>	2.45(7.7)	(1.97)	1.26(2.42)
<i>M1</i>	1.80(4.04)	1.94(9.3)	3.07(23.2)
<i>M2</i>	(3.8)		
<i>M3</i>		1.94(9.3)	(2.2)
<i>M10</i>		2.03	
<i>S1</i>		1.12	(7.22)
<i>M5</i>		1.12	1.13
<i>M7</i>		1.07	
<i>P8</i>		1.07	
<i>M11</i>		0.97	
<i>E1</i>		0.93	2.53(14.11)
<i>M4</i>		0.93	
<i>M6</i>		(1.79)	1.73(7.6)
<i>P2</i>			1.46(2.87)
<i>P11</i>			1.46
<i>P12</i>			1.11
<i>P13</i>			1.11

Vesna Bojicic-Dzelilovic

v.bojicic-dzelilovic@lse.ac.uk

LSE IDEAS, London School of Economics and Political Science, Houghton Street, WC2A 2AE
London, UK.

Vesna Bojicic-Dzelilovic is senior research fellow at LSE IDEAS at the London School of Economics and Political Science. She is an expert on the political economy of conflict and development with a particular interest in conflict-crime nexus, informal governance and the role of international aid in transitioning from conflict. She has published articles on these issues in a range of academic journals including *Review of International Political Economy*, *Conflict, Security and Development*, *Social Justice* and *Feminist Journal of International Politics*.

Denisa Kostovicova

d.kostovicova@lse.ac.uk

European Institute, London School of Economics and Political Science, Houghton Street, WC2A 2AE
London, UK.

Denisa Kostovicova is an associate professor in global politics at the European Institute at the London School of Economics and Political Science. Her work focuses on post-conflict reconstruction and transitional justice. She is the author of *Kosovo: The Politics of Identity and Space* (Routledge 2005), and co-editor of numerous edited volumes. Her articles have been published in *International Studies Quarterly*, *Security Dialogue*, *Journal of Ethnic and Migration Studies*, and *Third World Quarterly*, among others.

Ahmet Suerdem

ahmet.suerdem@bilgi.edu.tr

Istanbul Bilgi University, Kazim Karabekir Cad. No: 2/13, 34 060 Eyüp Istanbul

Ahmet Suerdem is professor at the Business Administration Faculty at Istanbul Bilgi University and senior academic visitor at LSE Psychological and Behavioural Sciences department. He was a European Council Post-Doc fellow at Paris 5, and Visiting Research Fellow at the UCLA and UCI. He is particularly interested in bridging qualitative and quantitative research methods, and his areas of expertise include science in society, text mining, content analysis, social network analysis, multivariate statistical analysis, consumer culture, and social aspects of system design.

Acknowledgement:

The authors thank anonymous reviewers and editors for their useful comments. We are grateful to our research participants for sharing their insights and for being generous with their time.
