

## NETWORK STRUCTURE OF SOCIAL CAPITAL

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**Abstract.** *In spite of different definitions of social capital, there is a high level of compliance that social capital, unlike other concepts related to socio-economic development, is unique because it is relational. Resources related to social capital exist inside the network of mutual relations of individuals and groups in a society. Individuals are embedded in the complex network of relations – they are members of immediate and broader family, belong to a certain religious and linguistic group, have ethnic and racial identity and belong to certain locality. Every individual has their own place in a society, and their position in the network of social relations considerably affects access to different resources. Notion of social capital is therefore inextricably linked to social networks and represents a key concept in their analysis. The aim of this paper is to investigate interdependence between social capital and social networks.*

**Key Words:** *Social capital, social networks, efficiency, structure, benefits*

### INTRODUCTION

Social capital represents one of the most powerful and popular metaphors in current social science research. It has recently gained importance in a variety of different research fields. Social capital can be seen as a key concept in analyzing social networks. It refers to a networked ties of goodwill, mutual support, shared language, shared norms, social trust, and a sense of mutual obligation that people can derive value from. Social capital then is about value gained from being a member of a network. By being a member people have access to resources that non-members do not have. These resources range from e.g. access to potential career moves, access to resources in entrepreneurial start-up processes, to access to cooperative services in developing countries. Lately, the concept has also been appropriated in the field of organizational learning and knowledge management. In general, social capital is seen as the glue that brings and holds communities together.

Broadly understood as referring to the community relations that affect personal interactions, social capital has been used to explain an immense range of phenomena, ranging

from voting patterns via health to the economic success of countries. Literally hundreds of papers have appeared throughout the social science literature arguing that social capital matters in understanding individual and group differences and further that successful public policy design needs to account for the effects of policy on social capital formation.

In spite of differences in defining the social capital (Džunić 2008, p.80), there is high level of compliance that social capital, unlike other concepts related to socio-economic development, is unique because it is relational. Resources related to social capital exist inside the network of mutual relations of individuals and groups in society. Notion of social capital is therefore inextricably linked to social networks and it can be seen as a key concept in their analysis. The aim of this paper is to investigate interdependence between social capital and social networks.

#### SOCIAL CAPITAL – RESOURCES EMBEDDED IN SOCIAL NETWORKS

We often observe countries with similar endowments of natural, physical, and human capital achieving very different levels of economic success. This paradox has led scholars to search for deeper and more meaningful explanations about what holds people and societies together in order to foster economic development. Over time, scholars have constructed various frameworks for understanding the social aspects of this phenomenon and of what we currently refer to as "social capital". Social capital is not only considered to be an essential basis for the social cohesion of a society, but at the same time as a main component of the wealth of a nation and as an important determinant of economic growth, besides physical, human and environmental capital (Hjerpe 1998, Wiman 1999). The view is empirically supported by results showing a relation between the social capital of a society and its economic well-being (Putnam 1993, Knack and Keefer 1997). Furthermore, there are also investigations pointing to the improvement of other dimensions of welfare such as education, health, rates of crime, and the environment (Coleman 1988).

Although the concept of social capital has a much longer existence, it has gained prominence in the last two decades. Its emergence in the field of political science and sociology started as a critique regarding the narrow analytic perspective on economic activities, which is immanent in the neoclassical school. Meanwhile, there are many case studies that have proven the importance of social networks in explaining economic behavior. Hanifan (1920) was the first author to use the social capital concept. According to him, social capital encompasses all the "invisible" resources that are of great importance in everyday life of individuals: goodwill, fellowship, sympathy and mutual ties of individuals and groups. Loury (1977) contributes racial income differences to different levels of connection to the labour market and of access to relevant information. Social context in which individual mature substantially influences their outcomes. It implies that absolute equality of opportunities is an ideal that is hard to achieve. Loury claims that traditional apprehension of inequality is wrong, based on individualistic approach and divorced from social dimension. Utter understanding of the income inequalities among ethnic groups has to be based on the comprehension of such social dimension like social networks, which substantially determine possibilities available to individuals. In other words, orthodox neoclassical theory, focused mainly on the generation of the competitive market for human capital, without taking into account social networks, cannot explain income inequali-

ties between people of different races. Individuals are, according to Loury, embedded in the complex network of relations – they are members of immediate and broader family, they belong to certain religious and linguistic groups, have ethnic and racial identity and belong to certain localities. Every individual has their own place in a society, and their position in the network of social relations considerably affects access to different resources.

On a theoretical level, Bourdieu (1986), Coleman (1988) and Putnam (1993, 2000) provide important contributions to the discussion on social capital. Bourdieu perceives social capital as a specific form of capital, which has to be studied in relation to economic and cultural forms of capital. He defines social capital to be "the aggregate of actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationship of more or mutual acquaintance and recognition" (1986, p. 248). Like all forms of capital, social capital is accumulated labor. It has its own capitalists who accumulate it in the form of relationships, networks, contacts: "... the network of relationships is the product of investment strategies, individual or collective, consciously or unconsciously aimed at establishing or reproducing social relationships which are directly usable in the short or long term ..." (p. 249). Bourdieu is specifically interested in the way different forms of capital shape the social world, especially the aspects of class struggle and class nature. Whereas the upper class takes their high level of social capital for granted, lower classes usually are aware of their scarce resources in terms of social capital, e.g. lack of collective bargaining power or access to career jobs.

The author that did most for the popularization of this concept, especially in sociology, was Coleman. His definition of social capital is individualistic. Coleman (1988) defines social capital rather vaguely as a "variety of entities with two elements in common: They all consist of some aspect of social structure, and they facilitate certain action of actors - whether persons or cooperated actors – within this structure" (p. 98). Emphasis is on those aspects of social structure that serve as resources for economic actors while trying to achieve their goals (Coleman 1988, p.101). Social capital analysis was initially grounded on the relationship between actors or between individual actors and a social aggregate. However, Putnam (1993, 2000) equalizes social capital with the civic engagement. He applies the concept of social capital to cities, regions and whole nations. He understands social capital as a set of properties of a social entity (e.g. norms, level of trust, or social networks) that enables joint activities and cooperation for mutual benefit.

The above-cited definition clearly demonstrates that there are various theoretical approaches and perspectives of social capital which use more or less narrow concept. However, it is almost indisputable that social capital is the property of a social entity and not of an individual (Golubovic 2007). It is a relational concept - it presupposes a social relation and exists only as far as it is shared by other individuals. Therefore, it cannot be the private property of a single person - it has a character of a public good (Grootaert 1998, Narayan 1999). The social capital of a society includes the institutions, the relationships, the attitudes and values that govern interactions among people and contribute to economic and social development. Social capital, however, is not simply the sum of the institutions that underpin society; it is also the glue that holds them together. It includes the shared values and rules for social conduct expressed in personal relationships, trust and a common sense of a civic responsibility, that makes society more than a collection of individuals. Without a degree of common identification with forms of governance, cultural norms and social rules, it is difficult to imagine a functioning society.

## SOCIAL RELATIONS AND SOCIAL NETWORKS

Since the notion of social capital is inextricably linked to social networks, we begin by defining a network as a set of nodes and the set of ties between them. In the case of social networks, the nodes represent actors (i.e., individuals, groups, organizations). There can be many kinds of ties between the actors. Research in a number of academic fields has shown that social networks operate on many levels, from families up to the level of nations, and play a critical role in determining the way problems are solved, organizations are run, and the degree to which individuals succeed in achieving their goals. The network can also be used to measure social capital - the value that an individual gets from the social network.

The basic building blocks of the social network analysis are social relations between actors and not the actors themselves. Although measures can be used to describe a particular link between two actors, the measures can be aggregated and assigned to a particular actor or used to describe the entire network. Social network measures assigned to individuals are not attributes of isolated individual actors; rather, they represent the actor's relationship within the network. If any aspect of the network changes, the actor's relationship within the network also changes.

The links between actors often involve some form of interaction, intended or unintended, such as communication, or represent a more abstract connection, such as trust or friendship, which implies interaction. Interaction can be purposeful, coincidentally random, or forced or constrained by factors external to the actors. Various reasons have been offered for why people interact (e.g., to satisfy social as well as other needs, to obtain desired outcomes, and so forth.) In a general sense, we summarize these reasons by assuming that people interact in order to make sense of, and successfully operate on, their environment. When the interaction is pleasant and helpful in this regard, the interaction continues and a relationship is formed. When the interaction is harmful or unpleasant, a negative relationship is formed, and continued interaction is typically avoided. Although initial interaction may be random, repeated interaction is not. Repeated interaction and inaction lead to social structure.

As far as particular content of the relationships represented by the ties is concerned, the most debated are the flows of information (communication), expressions of affection (friendship), goods and services (workflow), and influence (advice). We consider ties that are repeated over time, thus establishing a relatively stable pattern of network interrelationships.

Social networks have been often equated with, or used to represent, social structure. Behavior, attitudes, norms, status, and so forth, have been interpreted in terms of the structure rather than the inherent properties of the actors. People behave within this social structure as if it were external to, and a constraint upon their interaction. The constrained behavior in turn underwrites and reinforces the observed, and socially shared structural patterns. These shared structural patterns also facilitate interaction, just as language facilitates communication (Brass and Labianca 1999). Interactions which occur within the constraints of structure can gradually modify that structure. Individuals break relationships and build new ones. In suggesting the emergence and modification of social structure via human behavior, we do not ignore individual agency nor the structural constraints, which may at times render it useless. However, the relation between structure and

agency is not one-sided. We cannot perceive actors as solely "actees", whose behavior, attitudes, values, and so forth, are determined by their positions in the social structure. Rather, structure and behavior are intertwined, each affecting the other. A social network is a social structure made of individuals (or organizations), which are tied (connected) by one or more specific types of interdependency. These interdependencies involve some form of interactions, like communication, or represents abstract relationships, as trust of friendship (which imply interaction). These actors are mutually linked by the same interests – they might like the same sport (sport associations) or perform the same kind of job (business associations). On the micro level, family and group of friends display characteristics of a network.

Research on network formation has attracted a lot of attention during the past decade. Substantial empirical evidence has been accumulated emphasizing the important role of social and economic networks in real world economies. Famous examples of network effects can be found in job search (Montgomery 1991), granting of credit (McMillan and Woodruff 1999) and in models of welfare participation (Bertrand et al. 2000).

#### THE ROLE OF SOCIAL NETWORKS

Many interactions, both economic and social, involve network relationships. Most importantly, in many interactions the specifics of the network structure are important in determining the outcome. The most basic example is the exchange of information. For instance, personal contacts can play critical roles in obtaining information about job opportunities.

A modern economy is characterized by interactions, both direct and indirect, between individuals. Three aspects of this interaction are important. Firstly, there are the different ways in which individuals interact. Secondly, there is the fact that agents learn over time, from their previous experience, about the consequences of particular interactions with other individuals. Thirdly, interactions take place through networks. These networks may involve trade, observation or active communication.

Network membership provides individuals with certain benefits, such as support, better access to information (lower cost of gathering information) and greater choice. Networks plays important role in supporting other aspects of social capital. Social norms are better accepted in the society where the ties between individuals are dense; in such societies the level of trust is also higher.

Economic sociologists often stress the beneficial role of social networks. Their evidence shows that social ties improve transaction outcomes. Economic actors often rely on social ties to reduce the risk and uncertainty that are involved in economic transactions. Selecting the best exchange requires information on available goods, sellers, buyers and prices. It is in this sphere that network can facilitate transactions. The structure of prior relations among people and organizations in a market can affect, or replace, information. Social ties offer *ex ante* and *ex post* advantages. Prior to a transaction, social ties reduce information asymmetry between buyer and seller; after a transaction, social ties reduce opportunism by imposing social obligations and effective sanctions on the seller. However, social ties also increase opportunities for deceit, deviance, and misconduct. As Granovetter (1985, p. 491) observes, "The trust engendered by personal relations pre-

sents, by its very existence, enhanced opportunity for malfeasance." So, we have to point out that social capital may have negative as well as positive consequences. It is evident that groups strongly influence behavior of individuals and that fact has been continuously neglected in neoclassical analysis. Social groups can create a high level of internal solidarity and trust. This type of behavior can be potentially harmful for society, especially if it impedes transmission of information outside the group. Social capital, unlike other types of capital (physical, human) produces more negative effects. This is because solidarity inside the group is often achieved at the expense of animosity towards those individuals that do not belong to the group.

Among the social theoreticians there is a high level of consensus about the significance and role of social networks on all levels, from the corporation success on the global level, to the resolution of everyday problems faced by the individuals. Social norms and information flows are perceived as a fundamental attribute of the network functioning. Relations between actors represent channels for transfer or flow of material as well as immaterial resources. In sociology, social network analysis involves contacts, ties and relations inside the group, through which actors are mutually connected. Social capital is not perceived as an individual attribute, but as a function of relations between actors and social institutions. Neoclassical conception of the natural order is rejected; instead, market is considered as a social construction which is partly result of social capital and that is why social networks and trust analytically precede markets (Sturgess, 1997).

Although it is clear that network structures are of fundamental importance in determining outcomes of a wide variety of social and economic interactions, far beyond those mentioned above, the authors are only beginning to develop theoretical models that are useful in a systematic analysis of how such network structures are formed and what their characteristics are likely to be.

#### STRONG *VERSUS* WEAK TIES

Networks may be formal and informal. Informal networks represent relations between limited numbers of individuals who know each other and who are tied by family or friendship ties, by geographical proximity etc. As long as such a network does not have legal permission, employed servant, written rules and its own assets, it does not represent formal organizations. Effects of the informal networks are small favors (mainly immaterial, such as house repairs, advice etc.) that are not registered in the *System of National Accounts* (some of them are almost impossible to quantify). Social network can outgrow into formal organization with rules, bureaucracy, attributes of a legal entity, with its own income source (through market, taxes etc.). Good examples are professional association of doctors (if members are individuals) or hospital associations (if members are organizations). Formal and informal networks are often closely intertwined. Their ties could be those of cooperation (when individual is the syndicate member and syndicate is closely connected with regional or national headquarters) or antagonistic (for example, when informal networks are used to protect corrupted official from the police investigation).

In the literature, difference is being made between dense and sparse networks. Dense networks possess overlapping ties between members of different groups and this kind of ties are missing in sparse networks.

Social networks enhance efficiency in the society by stimulating the coordinated activities. According to Putnam, one of the factors that strongly affects differences in local authorities efficiency and in regional economic performances in Italy are the differences in regional social structures. Efficient social governance relies on the tradition of civil engagement and on the structure of civil networks. In those regions where social relations are more horizontal, based on trust and common values, participation in voluntary organizations and associations is higher and thus social capital is more developed.

It would be wrong to conclude that it is preferable to establish as many civil associations (more chorus, sport associations etc.) as possible, as many wrongly be concluded from the Putnam works. The essence is that the way we are connected with others has significant implications on the quality of our life, irrespective of whether we live in a rich or poor country. Societies might be rich in social capital inside social groups, but nevertheless confronted with poverty, corruption and conflicts. In order to understand why this is so, it is necessary to examine the intertwined correlations among groups. Basically, there are two theoretical approaches in explaining the economic and social benefits of social relations on the transfer of knowledge and information (Garguilo i Benassi, 2000; Uzzi, 1999) - theory of the strong and theory of the weak ties. These two approaches correspond to opposing approaches concerning the optimal structure of networks. While Coleman (Coleman, 1990) points out that closed networks can provide better ground for cooperation, R. Burt (Burt, 1992) stresses cohesive ties in closed networks as a source of rigidity. In both cases, the core argument relates to knowledge and information transfer between the members.

Every society consists of social groups and those groups affect the evolution of attitudes, beliefs and values and determine the approach to resources and opportunities. Since the majority of societies are not homogenous, but divided through ethnic, class, religious or other attributes, different groups have different access to resources and power. There could exist high level of social capital inside the group, but members of the group might be excluded from other groups. Only cross-cutting ties between groups provide economic possibilities for those that belong to less powerful and marginalized groups. They contribute to social cohesion, a critical element of social stability and economic welfare in the long run. Social cohesion requires not only high level of social capital inside the group, but also cross-cutting ties between the groups.

As far as cross-cutting ties are concerned, several authors pointed out the significance of these ties as a means to access resources outside the group. Two authors gave significant contribution in this area. The first is Granovetter (1973), who directed attention to the significance of ties that reside outside the narrow circle of family, friendship and ethnic ties, because these ties are richer in resources. The second is Loury (1997), who maintained that youth from the minority social groups are in unfavorable position not because of the discrimination on the part of employer, but because they lack information about job possibilities. If existing social networks impede (in the absence of cross-cutting ties) circulation of ideas, information and resources between groups, society will be confronted with strengthening of economic, social and political divisions in a society, with the negative influence on growth.

## CONCLUSIONS

In spite of different definitions of social capital, there is a high level of compliance that social capital, unlike other concepts related to socio-economic development, is unique because it is relational. Resources related to social capital exist inside the network of mutual relations of individuals and groups in society. The essence of the social capital concept are social relations, i.e. characteristics of these relations which enable actors to fulfill their goals. Social capital is especially important in that context as an analytical tool that explains how social ties affect actors and how actors use social organization to realize their interests.

Social networks are a very important aspect of social capital. Social capital is a resource used by individuals in fulfilling their goals. But these resources are not their property in formal sense. While economic capital is located on banking accounts, human capital inside the human heads, social capital is a component of the network of mutual relations between actors. In order to use social capital, an individual has to be linked to others and these individuals, not himself, are the real source of his advantages. As an attribute of social structure social capital is not property of any individual, instead it is embedded in social structure and has characteristics of a public good.

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## MREŽNA STRUKTURA DRUŠTVENOG KAPITALA

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*Iako postoje razlike u načinu definisanja, postoji visok stepen saglasnosti oko toga da je, za razliku od drugih koncepata vezanih za društveno-ekonomski razvoj, društveni kapital jedinstven jer je relacioni. Resursi koji se vezuju za društveni kapital egzistiraju unutar mreže međudnosa pojedinaca i grupa u društvu. Akteri su utkani u kompleksnu mrežu odnosa – oni su članovi uže i šire porodice, pripadaju određenim religioznim ili jezičkim grupama, imaju etnički i rasni identitet i žive na određenom području. Svaki pojedinac ima svoje sopstveno mesto u društvu, a njegova pozicija u mreži društvenih odnosa u znatnoj mjeri utiče na pristup različitim resursima. Društveni kapital, dakle, tesno je povezan sa društvenim mrežama i zato predstavlja jedan od ključnih koncepata u njihovoj analizi. Cilj ovog rada je da istraži medjuzavisnost izmedju društvenog kapitala i društvenih mreža.*

Ključne reči: *društveni kapital, društvene mreže, efikasnost, struktura, koristi*