

Social Capital: Conceptual Overview and Measurements

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Abstract:

The idea of social capital has enjoyed a remarkable rise to prominence in both the theoretical and applied social science literature over the last decade. From one aspect social capital refers to information, ideas, support and such resources that individuals are able to acquire by virtue of their relationships with other people. The second approach to social capital refers to the nature and extent of one's involvement in such networks and organizations and is related to informal networks and formal civic organizations. This article deals with a conceptual overview of social capital and reviews its literature which contains an impressive and still growing number of theoretic and applied studies. Yet is there gap between theoretical understandings of social capital and the ways it has been measured. This gap has led to empirical confusion about the meaning and measurement of social capital. This article seeks also to introduce the quantitative and qualitative measurements of social capital.

Key Concepts: Social capital, network

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Introduction

The role of social capital in economic development has become an increasingly important and topical issue for both scholars and policy-makers. Governments and societies seek economic growth, but are also increasingly concerned about its impact on natural and social environments. It should be recognized that increased national economic prosperity is not necessarily accompanied by increased social well being for all. Well being is not directly correlated with income, rather distributional effects are very important. We have to be concerned about various groups in society (age, income, ethnic or gender related) share in economic progress; concerned about hidden forms of exclusion or poverty; concerned about the quality of life and health of children, the elderly women and men, various ethnic groups and persons confronted by social or physical disadvantage. Our quality of life is always affected by fundamental needs such as economic sufficiency, optimal health, and happy relationships (OECD, 2001).

This paper provides some background material on social capital focusing on conceptual overview and measurements to expand our understanding of how social capital may enlarge our understanding of society and social well being.

A Conceptual Overview of Social Capital

Although the nature and importance of social relationships have long been of interest to social scientists, thinking of such relationships as a form of capital is relatively new. The term social capital was first used in the 1980s (Onyx and Bullen, 1998) and popularized amongst others by Bourdieu (1983; 1986), Coleman (1988; 1990) and Granovetter (1973; 1983; 1985). Wide discussion of social capital was prompted after the publication of Putnam (1993). The concept of social capital, particularly its definition, is currently receiving a lot of attention. Many definitions define what social capital is and what it does.

Social capital is dealt with in two related, but clearly different approaches. The first approach refers to information, ideas, support and such resources that individuals are able to acquire by virtue of their relationships with other people. This way is associated with sociologists such as Ronald Burt, Nan Lin, and

Alejandro Portes (Woolcock and Narayan, 2000). These resources are social capital. The main characteristic of these resources are that they are only accessible in and through these relationships, unlike physical capital such as tools and technology or human capital like education and skills which are essentially the property of individuals. These relationships form a network i.e. who interacts with whom, how frequently, and on what terms. The structure of a given network thus has a major influence on the flow of resources through that network (Burt, 2000). "Those who occupy key strategic positions in the network, especially those whose ties span important groups, can be said to have more social capital than their peers, precisely because their network position gives them heightened access to more and better resources" (Grootaert et al., 2004).

The second approach to social capital which is more common is related to informal networks and formal civic organizations and refers to the nature and extent of one's involvement in such networks and organizations. The scope of this involvement covers various activities from chatting with neighbors or engaging in leisure activities to joining environmental organizations and political parties. This approach is most closely associated with political scientist Robert Putnam (Grootaert et al., 2004).

According to the two approaches social capital is not a single entity, but is rather multi-dimensional in nature. It describes circumstances in which individuals can use membership in groups and networks to secure benefits (Sobel, 2002). This follows the definition offered by Bourdieu (1986): "Social capital is an attribute of an individual in a social context. One can acquire social capital through purposeful actions and can transform social capital into conventional economic gains. The ability to do so, however, depends on the nature of the social obligations, connections, and networks available to you." Social capital is most frequently defined in terms of the groups, networks, norms, and trust that people have available to them for productive purposes.

A point to note is that, by definition, social capital is not restricted to particular social networks of one size or another. The literature on social capital indicates considerable work (Stone, 2001) in local and other community networks (Putnam 1993; Kreuter et al., 1999), at the level of nation states (Knack and Keefer 1997), and within families (Coleman 1988; Amato 1998; Furstenberg and Hughes 1995; Furstenberg 1998).

In the growing literature on social capital, a number of themes such as participation in networks, reciprocity, trust, social norms, the commons and proactivity are emerging. It is widely agreed that social capital is the shared knowledge, understanding, rules, norms, obligations, reciprocity and trust embedded in social relations, social structures and society's institutional arrangements which enable members to achieve their individual and community objectives (Narayan, 1997).

Krishna and Shrader (1999) presented a conceptual framework to demonstrate the concept of social capital. We borrow their framework (figure 1) to better clarify the concept. This framework was adapted from Bain and Hicks (1998). According to this model, social capital is divided roughly into two, macro and micro, levels. The macro level refers to the institutional context in which organizations operate (Olson, 1982; North, 1990) and includes formal relationships and structures, such as the rules of law, legal frameworks, the political regime, the level of decentralization and the level of participation in the policy formulation process (Bain and Hicks 1998). The micro level which includes: cognitive and structural of social capital, refers to the potential contribution that horizontal organizations and social networks make to development (Uphoff, 1996).



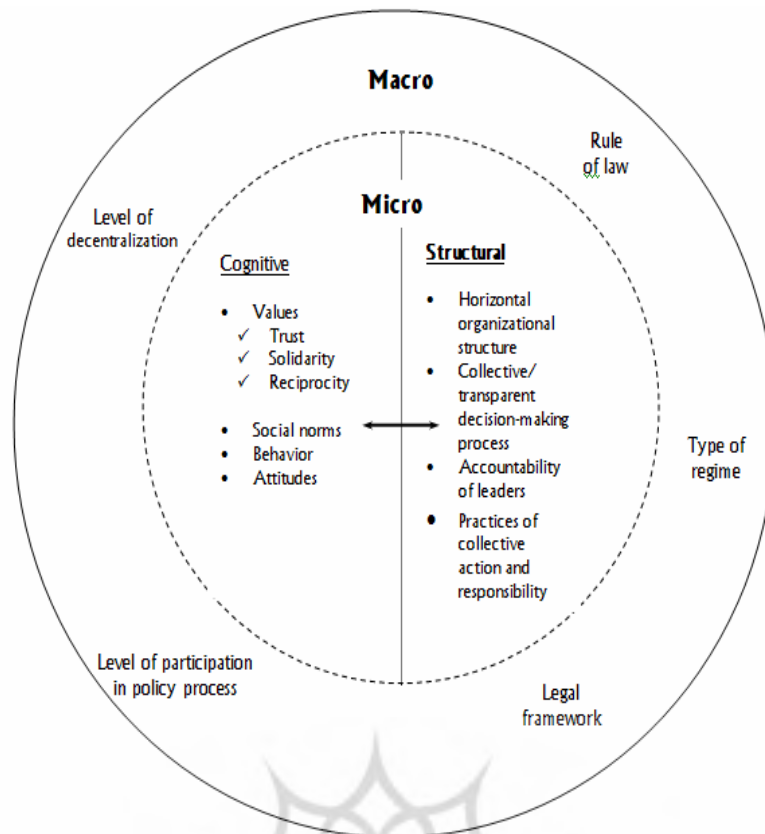


Figure 1: Conceptual framework of social capital (borrowed from Krishna and Shrader, 1999)

Literature Review

As mentioned above, social capital is relatively new concept, though the nature and importance of social relationships have long been recognized by social scientists. The term social capital was first coined in the 1980s by Bourdieu and Coleman (Onyx and Bullen, 1998). Since the Putnam's work (1993), the concept of social capital has attracted theoretical and empirical research. Yet, as Paldam (2000) points out, the social capital literature is a new field that is "suffering from a great lack of good, reliable data, both time series and cross-country evidence" (p. 649).

The literature contains an impressive and still growing number of case studies. This has been demonstrated in almost all parts of the world and in sectoral settings ranging from irrigation and water supply, to forest management and management of wildlife

resources, to the provision of credit to the poor and the implementation of health service programs. Many case studies are cited by Uphoff (1993), Narayan (1997), Grootaert (1998), Krishna et al (1997), Uphoff et al. (1998), and Woolcock (1998). The following literature review is conducted in order to get understanding and grasp of the various and different case studies on social capital; not to cover all works have been conducted so far, but are indicative of such growing literature.

Social capital in Italy was studied by Putnam et al. (1993). They treated social capital as features of social organization, such as networks, norms and social trust that facilitate coordination and cooperation for mutual benefit. Four measures (association density, newspaper readership, referenda turnout, and preference voting) were combined using factor analysis. Sources of data were individual surveys, interviews of councilors and leaders, case studies, official sources. The finding of the research indicated that Social capital is strongly and consistently associated with regional governments' performance in multiple social domains. Horizontal groups are associated with higher social capital in comparison with those that are more hierarchical in their organization.

In 1995 in a short article, Robert Putnam (1995b) announced that there has been a dramatic decline in the level of participation in group activities in the United States that threatened the quality of democracy and the quality of life. This big idea stimulated a broad range of social capital studies. *Bowling Alone* (Putnam, 1995a) develops the argument put forth in the 1995.

Brehm and Rahn (1997)¹ in their study defined social capital as webs of cooperative relations between citizens that facilitate resolution of collective action problems and measured it by interpersonal trust (combine responses to three questions using factor analysis) in United States. The findings of this research showed that higher interpersonal trust leads to greater civic engagement and more confidence in political institutions. More trust leads to higher civic engagement. Norms influence networks, the opposite direction of influence to that proposed by Putnam et al. (1993).

Social capital as quantity and quality of associational life and the related social norms was measured by Narayan and Pritchett

¹ Much of the reviewed literature (1997-1998) in this section is extracted, with slight modifications, from Krishna and Shrader (1999).

(1997) in Tanzania using multiplicative Index (number of group memberships, heterogeneity among group members, and satisfaction with group functioning). Data for this research were collected by household survey (n=1,370). The findings suggested that strong association exists between social capital and household income. More heterogeneous groups are associated with higher social capital.

Schneider et al. (1997) conducted individual interviews (n=1,270) to measure social capital in United States. They used four separate measures (not combined), including membership of PTA, engagement in volunteer activities, conversations with other parents, and level of trust in teachers. The findings showed that giving parents a choice of school for their children is associated with increasing their social capital. Government policies influence the level of social capital. Structure influences social capital and not vice versa as Putnam et al. (1993) suggest.

In his study of social capital in Britain, Hall (1997) defined social capital as networks of sociability, both formal and informal, and norms of social trust associated with such networks. In order to measure social capital he used separate indicators for associational membership, voluntary and charitable work, informal sociability, and generalized trust. The study concluded that high levels of social capital were associated with high levels of political engagement. The study also did not regard the horizontal-vertical or the homogeneous-heterogeneous distinction to be important.

Portney and Berry (1997) in their study of social capital in United States measured social capital as participation in different social organizations. Data were collected by individual surveys in five cities (n=1,100). The research showed that compared to other organization types, participation in neighborhood groups is more strongly associated with sense of community. Different types of social groups are associated with different levels of social capital.

To study social capital in United States, Sampson et al. (1997) defined social capital as collective efficacy, i.e. mutual trust and willingness to intervene for the common good and measured it by combination (via factor analysis) of responses to ten survey questions. Data were collected by conducting household surveys (n=2,400), focus groups, and official sources.

Morris (1998) used four separate measures (not combined), including, women in associations, newspaper readership, and electoral turnout to measure social capital in India. He concluded

that states of India that are well endowed with social capital have been more successful in reducing poverty. He did not regard the horizontal-vertical or the homogeneous-heterogeneous distinction to be important.

Grootaert (1998) in his study of social capital in Indonesia defined social capital as institutions, relationships, attitudes and values that govern interaction among people and contribute to economic and social development. The measure used in this research is multiplicative index of three factors (number of group memberships, internal heterogeneity of groups, and participation in group decision-making). Data sources were household survey (n= 1,200), interviews with community leaders, official sources. The main conclusion was household social capital influences household welfare.

Rose (1998) carried out an individual survey (n=1,904) in Russia to measure social capital as stock of formal or informal social networks that individuals use to produce or allocate goods and services. In this research there was no single measure and social capital was assessed in different situations as membership in specific networks that enable an individual to cope with sector specific needs. It was concluded that different social networks enhance individuals' efficacy with respect to particular sectors. There is more than one type of social capital. Each type is associated with specific forms of social networks.

Stolle and Rochon (1998) studied social capital in three countries including Germany, Sweden and United States. Social capital was defined as norms and networks that link citizens to one another and that enable them to pursue their common objectives more efficiently. Twelve indicators were grouped into four separate sets relating, respectively, to political efficacy, generalized trust, trust in government, and optimism to measure social capital. Required data were collected by conducting surveys among members of 102 associations in these three countries. The research showed that greater membership diversity in an association is associated with higher level of social capital; and social capital has different types that are related to different types of social networks.

Krishna and Uphoff (1999) studied social capital in India. The definition used in this study is that social capital is cognitive aspects of social relations that predispose individuals toward mutually beneficial collective action and structural aspects that

facilitate such action. Six survey questions were combined using factor analysis to measure this phenomenon. The results indicated that social capital is positively related with development performance. Informal groups are more salient than formal groups.

In his paper Grootaert (2002) estimated the impact of social capital on household welfare and poverty in Indonesia. The research focused on households' memberships in local associations and their day-to-day decisions affecting their welfare and consumption. The main finding was that there is a positive correlation between social capital and household welfare, so that households with high social capital have higher expenditure per capita, more assets, higher savings and better access to credit.

Larance (2001) studied the possibility of fostering social capital through non-governmental organizations offering poor women economic opportunities and access to social development across rural Bangladesh. The findings of the research indicated that the social implications of microcredit lending via the Grameen Bank was as powerful as the economic implications. In a village-level assessment, Grameen Bank members' gradual social capital formation was evidenced in evolving trust and expanded networks.

Miguel et al. (2004) studied the importance of social capital in promoting economic growth. This research examined the effect of social capital on industrialization in Indonesia. They analyzed a rich set of social capital and social interaction measures, including voluntary associational activity, and levels of trust and informal cooperation. Findings outlined in this article suggested that initial social capital does not predict subsequent industrial development across 274 Indonesian districts.

Fidrmuc and Gerxhani (2005) used recent Euro barometer survey data to document and explain the stock of social capital in 27 European countries. The study applied regression analysis of determinants of individual stock of social capital. The findings of the research revealed that social capital in Central and Eastern Europe, measured by civic participation and access to social networks, lags behind that in Western European countries. The results showed also that this gap persists when individual characteristics and endowments of respondents were accounted for, but disappears after controlling for aggregate measures of economic development and quality of institutions.

Akçomak and Weel (2006) in an empirical investigation of 102 European regions in the period 1990-2002 investigated the

interplay between social capital, innovation and economic growth in the European Union. The research showed that higher innovation performance is conducive to economic growth and that social capital affects growth indirectly by fostering innovation. The findings suggested that there is only a limited role for a direct effect of social capital on economic growth.

Fischer and Torgler (2007) using the International Social Survey Program 1998 data from 26 countries investigated the impact of relative income on 14 measurements of social capital. This study analyzed the impact of relative income concerns on the creation of social capital using two different reference groups and measured social capital along four different dimensions including general trust between people, trust in institutions, compliance with social norms, and civic engagement in form of voluntary activities.

From this and other literature it can be hypothesized that (Garson, 2006):

- The more the level of participation in voluntary associations, the greater the social capital.
- The more the networking, the greater the social capital.
- The more the mentoring and mutual support in an organization, the greater its social capital.
- The greater the prevalence of passive media (ex., television), the less the social capital.
- The greater the social capital, the more prevalent the norm of reciprocity (bargaining, compromise, pluralism).
- The greater the social capital, the higher the priority of the norm of equality.
- The greater the social capital, the greater the confidence in government (and other institutions).
- The greater the social capital, the easier to mobilize support for problem solutions.
- The greater the social capital, the higher the percentage of problem-solving outside the governmental sector.
- The less the social capital, the greater the need to rely on authoritative controls.

Measurement

Despite its historical roots (Putnam 1998; Winter 2000), yet is there gap between theoretical understandings of social capital and

the ways it has been measured. This gap leads to empirical confusion about the meaning, measurement, outcomes and relevance of social capital (Paxton, 1999). The measurement of social capital may provide insights into social functioning, and how networks and links can be utilized to contribute to positive outcomes for the individual, group and community alike.

Social capital can be analyzed on a group level (Coleman, 1990, Putnam, 2000) or on an individual level (Glaeser et al., 2002). It may distinguish three major approaches to social capital: micro (cognitive), macro (institutional) and meso (structural) approaches. The micro-approach focuses on the nature and forms of cooperative behavior; the macro-approach deals with the conditions for cooperation; and the meso-approach emphasizes structures that enable cooperation to take place (Franke, 2005).

These approaches can be measured by quantitative or qualitative methods¹ The quantitative measurement tools include five methods (Franke, 2005). The first method is statistical integration approach which is generally used in the economic sector, particularly to provide data for national accounting purposes (see Norris and Bryant, 2003; Healy, 2003). The second method is Social Capital Indexes which requires prioritizing the data to be collected and then compiled to create indexes or a scale. In this method there must be a theoretical link between the indicators, but a statistical link is not required (see Van Tuinen, 1995; Onyx and Bullen, 1998). This approach is useful for a comparative analysis in time, space, between groups, or in relation to benchmarks. The third method is the special survey. This kind of survey collects a micro-data file describing as many different aspects of the study subject as possible to answer a main question that we are attempting to answer. In this approach we seek to establish links between variables by correlation, regression, multivariate analysis, etc. or identify specific manifestations of social capital among certain groups of the population by typological analysis. The fourth method is the insertion of a standardized social capital module in thematic surveys (see Zukewich and Norris (2005). The main focus of thematic surveys is to highlight a strategic question in relation to a target population or area to collect information on a specific research or policy

¹ This section is based on Franke (2005).

question. In this method one has to develop a standardized module of questions to define social capital as best as possible and to measure the main dimensions of social capital. International efforts have been made by the Sienna Group to propose a standardized module to measure the main dimensions of social capital. This proposal is largely based on the work of the United Kingdom's Office of National (Green and Fletcher, 2003). The fifth method is longitudinal survey incorporating social capital. This kind of survey is mainly designed to collect information integrating multiple issues of a person's life trajectory in order to understand the trajectory of individuals, families and the interdependence of various aspects of their lives. Today culture, family, education, health, work and social networks are all interrelated to the extent that the conditions that affect one domain of our lives necessarily influence the other life domains (see Bernard, 2004). The studies of social networks theme within longitudinal surveys have been gaining more importance. Some thematic reports linking the various issues, including physical and mental health, education, work and income, time use, family and networks, are available on the internet site.

The other measurement tool is quantitative one including five methods (Franke, 2005). The first method is applying qualitative methodology to statistical surveys. This method can be used to interpret quantitative data, track direction of certain causal links and investigate new phenomena for which there are no strong hypotheses. The concept of social capital could benefit from this technique, particularly to clarify issues such as times when individuals activate their networks of relationships.

The second method is case study. The case study approach can be applied to study social capital in specific situations (see Schneider, 2004). It may lead to a more in-depth understanding of a phenomenon which may not be clarified by other sources. This technique can be useful for studies of collective social capital, particularly where traditional surveys fail to collect required information. The third method is Meta analysis. This approach uses appropriate tools to bring together data from comparable studies and analyze these data, or to bring together relevant studies seeking to answer a specific question in order to generate new knowledge (Charbonneau, 2005). The fourth method is social capital observatory. This method can produce various forms of information on social capital such as quantitative surveys,

qualitative interviews, archival searches, administrative data, and case inventories. With the advent of the internet, various sites, nowadays, are taking on the role of observatory. The Bullen's *Resources on Understanding and Measuring Social Capital* and Sabatini's *Social Capital Gateway* can be mentioned as examples of such electronic sites.

The fifth method is appraisal one. The appraisal method focuses on social capital dimension by recognizing the value of networks and social ties, when developing and evaluating projects, programs or policies. Some evaluation criteria and tools can be applied to evaluate existing social capital during the development stage of an intervention project or program. For example, the Social Capital Impact Assessment (SCIA) can be used to analyze the impact of the implementation of a program or project on social capital (Feldstein and Sander, 2007).



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