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## Under the Social Capital Umbrella: Definition and Measurement

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### Under the Social Capital Umbrella. Definition and Measurement

#### Francesca Modena

#### **Abstract**

In the last two decades social capital has become one of the most analyzed and cited concepts in the social sciences. On the one hand it is a powerful idea, used to explain a very wide set of socioeconomic phenomena. On the other hand social capital is disputed and ambiguous: there are a number of different meanings because of different theoretical frameworks. This conceptual vagueness is reflected in a nebulous empirical application of the idea of social capital. This work critically discusses the most relevant definitions of social capital, exploring how different scholars understand social capital, which are its main dimensions and whether there is a unique latent variable, whether social capital is certainly benign, and what kind of measures should we use to estimate its level.

#### 1. Introduction

In the last two decades social capital has become one of the most analyzed and cited concepts in the social sciences. On the one hand it is a powerful idea, used to explain a very wide set of socioeconomic phenomena, both micro and macro (i.e. health, education, income equality, subjective well-being, innovation, growth). On the other hand social capital is disputed and ambiguous: there is a mismatch of term and concept (Farr, 2004; Roche, 2004), and there are a number of different meanings because of different theoretical frameworks. Social capital "risk trying to explain too much with too little and is being adopted indiscriminately, adapted uncritically, and applied imprecisely" (Lynch *et al.*, 2000, p. 404 – quoting from Woolcock, 2001).

This conceptual vagueness is reflected in a nebulous empirical application of social capital. A huge number of indicators are used to capture different components of social capital: there is not a consensus on a simple basic measurement technique, and comparability between studies is difficult.

A number of questions arise form the large amount of studies on social capital. How do various scholars understand social capital? Do different definitions of social capital catch features of the same construct (i.e. there is a unique latent variable), or do they represent a number of different phenomena that should be treated as distinct? Which are the interdependences between different dimensions of social capital? Is social capital certainly benign? What kind of measures should we use? The debate about these issues is still confuse. This work contributes in dealing with these questions.

The paper is organized in the following way. Section two outlines the definitions and conceptualizations of social capital. Section three focuses on the measurement of social capital, discussing the main indicators and the most problematic features that emerge from the empirical literature. Section four concludes.

#### 2. Definition and conceptualization

The definition of social capital is far from clear, and the concept has been used in a number of different meanings issued from different theoretical approaches. The most-cited authors in the social capital literature are Bourdieu, Coleman and Putnam. Bourdieu defines social capital as the resources gained from the network: "social capital is the sum of the resources, actual or virtual, that accrue to an individual or group by virtue of possessing a durable network of more or less institutionalized

relationship of mutual acquaintance and recognition" (Bourdieu and Wacquant, 1992, p.119). Social capital regards relations (and social obligations) between individuals within specific groups or categories (Bourdieu, 1986).

Coleman (1988, 1990) defines social capital as a functional concept: "it is not a single entity, but a variety of different entities, with two elements in common: they all consist in some aspect of social structures, and they facilitate certain actions of actors within the structure" (Coleman, 1990, p.302). Social capital facilitates coordination and cooperation between people, and relates to people's ability to work voluntarily together. Coleman takes into account both horizontal and vertical networks, and relations between individuals as well as other entities (i.e. firms).

Putnam understands social capital as "connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them. [...] A society of many virtuous but isolated individuals is not necessarily rich in social capital." (Putnam, 2000, p.19). Social capital enables individuals "to act together more effectively to pursue shared objectives" (Putnam, 1994, p.1).

The broadest and most encompassing view of social capital is given by the World Bank: "social capital refers to the institutions, relationships, and norms that shape the quality and quantity of a society's social interactions. ...social capital is not just the sum of the institutions which underpin a society – it is the glue that holds them together" (World Bank, 1999). Similarly, Iyer et al. (2005, p.1016) state that "social capital, in essence, is the institutions, relationships, attitudes and values governing interactions amongst people and contributing to economic and social development".

Burt (2000, p.4) argues that there is a point of general agreement on the notions of social capital: "social structure is a kind of capital that can create for certain individuals or groups a competitive advantage in pursuing their ends. Better connected people enjoy higher returns". Besides this general consensus, the cited definitions of social capital differ for the level of analysis (individual or community) and the dimensions included under the social capital "umbrella" (structural and cultural). This section explores these differences.

#### Individual and collective property

Social capital can be understood as a property of individuals or communities. According to the individualistic approach, social capital is an attribute of individuals, and its building and maintenance is the result of individuals' strategic decisions (Bourdieu, 1985; Becker, 1974, 1996; Portes, 1998; Burt, 2000, Glaeser et al., 2001¹). Adler and Kwon (2000) call this approach the 'external view of social capital'. Differently, Coleman and Putnam define social capital as a community asset. Social capital is "an attribute of the social structure in which a person is embedded. Social capital is not the private property of any of the persons who benefit from it" (Coleman, 1990, p.315). Following the collective good vision (called the 'internal view of social capital' by Adler and Kwon, 2000), social capital refers to the performance of the entire network and it is by definition available to all participants in networks. Esser (2008) uses the terms 'relational' and 'system' capital to define social capital respectively at the individual and collective level. "Both aspects can interact empirically even though they consist of two theoretically very distinct processes" (Esser, 2008, p.24).

#### Structural and cultural aspects

Not only social capital can be analyzed at different levels, but it comprises different aspects. Literature distinguishes between structural and cultural<sup>2</sup> aspects. The former is related to connections and networks between people and groups, and it is a relative objective and externally observed construct; the latter refers to social norms, values, trust, attitudes, and beliefs, and it is a more subjective and intangible concept (Grootaert and van Bastelaer, 2001). Putnam's view of social capital comprises both these aspects. Similarly, the OECD defines social capital as "networks together with shared norms, values and understandings that facilitate co-operation within or among groups" (Cote and Healy, 2001, p.41). Woolcock (2001) defines social capital as the norms and networks that facilitate collective action. Other scholars focus on the cultural feature: according to Fukuyama "social capital can be defined simply as an instantiated set of informal values or norms shared among members of a group that permits them to cooperate with one another" (Fukuyama, 1999, p. 16); Bowles and Gintis (2002) argue that "social capital generally refers to trust, concern for one's associates, a willingness to live by the norms of one's community and to punish those who do not" (p.1). Degli Antoni (2005) identifies

<sup>&</sup>lt;sup>1</sup> Glaeser et al. (2001) analyze the formation of social capital using a model of optimal individual investment decisions.

<sup>&</sup>lt;sup>2</sup> Some authors use the term "cognitive" instead of "cultural" aspects of social capital. See for example Harpham, 2003, Grootaert and van Bastelaer (2001). In some cases the two terms can be used as synonymous, in others cultural refers to a broader concept than cognitive (Van Deth, 2008).

social capital as the likelihood to observe "trustworthy behaviours" in reply to "trusting behaviours". In the view of Guiso, Sapienza, Zingales (2006, 2007) social capital is defined in terms of the culture that characterizes a certain social group<sup>3</sup>. Maskell (2000, p.111) states that social capital is "the values and beliefs that citizens share in their everyday dealings and which give meaning and provide design for all sorts or rules". Mancinelli and Mazzanti's (2004, p.311) definition is strictly linked to the concepts of trust and cooperation: "social capital is an intermediate capital good privately and intentionally produced, which endogenously accumulates from the flow of agents investments in voluntary cooperative effort".

The distinction between structural and cultural aspects of social capital raises the question of whether we should focus on the sources of social capital rather than consequences, i.e. on what social capital is rather than what it does (Woolcock, 2001). Some scholars view cultural aspects as components of social capital (Putnam, 1994; Paldam, 2000), others understand them (and trust in particular) as factors which can influence or might be an effect of social capital, but that are not part of the definition of social capital itself (Tura and Harmaakorpi, 2005; Lin, 2008). Cook (2005) also suggests that trust is a factor distinguished from social capital: "it may serve as an important mediating factor for social capital to generate effects in time or situations of uncertainty and high risk" (Cook, 2005 - quoted in Lin, 2008, p.17).

We can open the two boxes of structural and cultural aspects identifying the elements that constitute them.

Among the structural aspect of social capital (social networks), an important distinction is that between horizontal and vertical relations. While Putnam refers only to horizontal links (narrow definition of social capital), Coleman comprises vertical as well as horizontal networks (broad definition of social capital). Horizontal networks can be further classified into bridging and bonding relations. The bonding form of social capital refers to strong links between peoples like us (such as the family), the bridging form is based on weak connections between heterogeneous people. Putnam (2000) suggests that bonding social capital is good for "getting by" while bridging is important for "getting ahead" and makes possible mobility opportunities

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<sup>&</sup>lt;sup>3</sup> It is worth noting that the link between social capital and values is present also in the other definitions, at least as regards the channels through which social relationships may affect individual choices (see Patrinos, Skoufias e Lunde 2007).

(Granovetter, 1973). Finally, vertical relations are named linking networks and refer to connections between people in different social strata (Cote and Healy, 2001). In a broader definition, linking social capital has the key function to leverage resources, ideas and information from formal institutions beyond the community (World Bank, 2000 – quoted in Woolcock, 2001). It is "different combinations of bonding, bridging, and linking social capital that are responsible for the range of outcomes we observe in the literature", and 'optimal' combinations change over time according to a dynamic approach (Woolcock, 2001, p.11).

Cultural aspects include trust and norms/values. Paldam (2000) identifies two types of trust: generalized and special. The former refers to trust to unknown member of society, the latter is trust in friends and in institutions. A related distinctions is between strategic (or knowledge-based) and moralistic trust (Uslaner, 2002). Strategic trust is a relationship between specific persons for a particular context, and reflects our expectations about how people will behave. Moralistic trust is faith in people we do not know and it is related to our idea about how people should behave. Sabatini (2008) suggests a different classification of trust: horizontal (trust in friends, relatives, ...), intermediate (trust in local institutions) and vertical (trust to government institutions). The second component of cultural aspects includes norms and values, such as obligations, tolerance, solidarity and democratic orientations (van Deth, 2008).

#### *Is social capital a single construct?*

"Structural and cultural aspects are not simply conceptualized as different features of social capital, but has highly (causally) interdependent characteristics": networks facilitate the development of trust and norms of reciprocity, such as "for Bourdieu 'connectedness' implies 'obligations" (van Deth, 2008, p.156). Sabatini (2008) analyses empirically the relationship between trust and networks. Bjørnskov and Svendsen (2003) conclude that at the national level social capital can be seen as a unitary concept. Paldam (2000) discusses whether structural and cultural definitions catch aspects of the same phenomenon, that is whether there is a latent variable behind all families of social capital (the so called 'social capital dream'). The author argues that network and trust definitions are related: "those you trust are likely to be your friends, and you are likely to trust your friends. [...] Network definition fits rather well into the trust-cooperation definitions. Everything might be shades of and

approaches to the very same basic phenomenon" (Paldam, 2000, p.641). Paldam points out that much theoretical and empirical work remains to prove the 'social capital dream'.

Other researchers do not agree with the existence of a single construct and understand social capital as a multi-dimensional phenomenon: all the components of social capital do not necessarily form a syndrome and should be treated as distinct (Flap, 2002; Durkin, 2000; Adam and Roncevic, 2003; Halpern, 2005).

#### Resource-based view of social capital

Two groups of theories have been distinguished on the basis of whether they understand social capital in terms of resources embedded in networks or as networks themselves. The former views social capital as the total amount of benefits (resources) individual can drawn on his networks/relations (Bourdieu, 1986; Lin, 2001; Tura and Harmaakorpi, 2005) ('network payoff definition', Paldam, 2000); the latter understands social capital as networks, i.e. the density and quality of vertical and horizontal relationships between individuals and organisations (Granovetter, 1973; Astone et al., 1999) ('network definition', Paldam, 2000). Paragraph 2.1 focuses on the definition of social capital in terms of resources embedded in social networks.

Similarly, Paldam (2000) distinguishes between trust definition and the trust payoff definition. According to the former definition, trust is a dimension of social capital, while according to the second approach trust capital is understood as the number of resources and benefits an actor can activate because of his reputation for being trustworthy" (Esser, 2008, p. 34).

#### Institutional view

Another approach to social capital, the so called 'institutional view', argues that the presence of social networks and the liveliness of the society is a product of the political, legal and institutional environment (North, 1990; Skocpol, 1995, 1996; Tendleer, 1997; Rodrik, 1998, 1999). This is the most encompassing view of social capital and extends "the importance of social capital to the most formalized institutional relationships and structures, such as government, the political regime, the rule of law, the court system, and civil and political liberties" (World Bank, 1999). This approach highlights the role of the state in supporting the capacity of various social groups to pursue common goals and act in their interest. The institutional view

understands social capital as a dependent variable. A relevant problem of this approach is endogeneity: social capital may influence the social and political environment that in turn shapes social capital such as the rule of law, and civil and political liberties (Olson, 1982; North, 1990 – quoted in Iyer et al., 2005).

#### Is social capital certainly benign?

There is a debate around the question of whether social capital is certainly benign or whether it can be dysfunctional. Paldam (2000) argues that social capital "is conservative or even harmful in some case, even if it is productive and benign in other cases". Following Tura and Harmaakorpi (2005, p.1116), social capital is a value free concept: "when one analyses the effects of social capital, it must be located in a specific context. These effects have value in relation to a certain environment and certain objectives. Social capital can be evaluated only based on how it 'works' or 'does not work' in order to reach those objectives". Social capital cannot be defined a priori as 'good' or 'bad'.

Though scholars agree that social capital is a neutral term, some of them tend to use the concept in a more positive or negative light. Portes (1998) has identified four negative consequences of social capital: exclusion of outsiders, excess claims on group members, restrictions on individual freedom, and downward levelling norms. On the other hand, Putnam's work tends to frame social capital as a positive concept: it produces civic engagement and a broad societal measure of communal health.

In discussing the positive and negative effects of social capital it is important to note the distinction between "bonding" and "bridging" social capital. There is a general consensus about the positive effects of weak ties (bridging capital): "in the presence of disparate social subgroups, bridging social capital may be needed to improve economic and social performance" (Iyer et al., 2005, p.1017). In contrast, bonding social capital is more likely to be associated with a negative meaning. Fukuyama (1995, 1999) argues that strong bonding ties crowd out other social connections and thus constrain economic prosperity. Belonging to certain groups can be detrimental for the diffusion of information (Gittel e Vidal, 1998), they discourage or prevent the access to new and wider opportunities (and resources), and may lead to social exclusion (Elliot, 2001). Olson (1982) argues that strong connections may encourage special interests and group lobbying thus hindering growth. Other authors do not agree with the negative meaning of bonding social capital. Putnam (1993)

emphasizes the positive role of close groups in generating trust, social ties and civicness among people<sup>4</sup>. Similarly, Esser (2008) argues that strong ties are necessary for the creation of trust and obligations: a real rational actor cannot try to collect weak ties only, he has to have some very good friends.

#### 2.1. Network-based theory of social capital

The network-based theory understands social capital as "resources embedded in one's social networks, resources that can be accessed or mobilized through ties in the networks. Through such social relations or through social networks in general, an actor may borrow or capture other actors' resources (e.g. their wealth, power or reputation)" (Lin, 2008, p.4). Lin's definition differentiates between accessed and mobilized social capital. The former "estimates the degree of access to such resources or the extent to which a potential pool of resources capable of generating returns is available in the networks to the actor. It indicates the capacity of capital. [...] Mobilized social capital reflects the actual use of a particular social tie and its resources in the production or consumption in the marketplace. It represents a selection of one or more specific ties and their resources from the pool for a particular action at hand" (Lin, 2008, p.5).

This approach underlines and develops the general view that social capital is network-based which has been acknowledged by many scholars such as Bourdieu, Coleman and Putnam. But with respect to other definitions of social capital, this view is much more specific, differentiates between sources of social capital and outcomes and thus avoids the fuzziness of previous accounts (Huber, 2009). Lin identifies three principal sources of social capital: structural position, an "actor's position in the hierarchical structure of social stratification", network locations, an "actor's location in the network", and purpose of action. Actions are further classified as instrumental, aimed to obtain additional or new resources, or expressive, aimed to maintain and preserve existing resources. Bonding relations are useful for expressive actions, while bridging networks are required to access and mobilize resources for instrumental actions (Lin, 2008). "One important argument in the bridging theories of networks is that as one reaches out of one's inner circle, one is more likely to encounter ties with

<sup>&</sup>lt;sup>4</sup> Literature distinguishes between "Putnam associations" and "Olson associations". The former are for example education, arts, music or cultural actitivies, voluntary organizations, ecological, human rights and peace associations. The latter include professional associations, trade unions, political parties or groups (see Degli Antoni, 2009). Knack and Keefer (1997) and Knack (2003) investigate, at an empirical level, the different hypotheses of Olson and Putnam.

more diverse characteristics and resources – the heterophily principle. [...] Heterophilous resources not only reflect different and new resources, but also increase the chances of containing better resources" (Lin, 2008, p. 14). This is the basic idea concerning the strength of weak ties (Granovetter, 1973) and the concept of structural holes (Burt, 1992). A structural hole is a hole between different networks. Individuals that belong to the same network share the same information, thus contacts strongly connected to each other are likely to provide redundant information benefits. Structural holes are gaps between nonreduntant sources of information. They are thus "an opportunity to broker the flow of information between people, and control the form of projects that bring together people from opposite sides of the hole" (Burt, 2000, p.7). The holes create a competitive advantage for an individual whose contacts link different networks. It is important to close the structural holes between different, non connected networks by means of only one contact (Esser, 2008). The actor who owns this contact has a high level of social capital because he reaches more people indirectly and thus has access to a higher volume of nonreduntant information. According to this approach, an individual's position in the structure of networks can be an asset in its own right (positional capital), since it gives access to greater opportunities.

The main features of the network-based theory can be summarized with respect to the questions identified in the previous section.

*Individual or collective?* 

The network-based theory of social capital is actor-centred: the focus is on individual's investments in social relations, individual's position in the network, and resources actors can access through networks. This approach can also be extended to the macro-level analysis. Lin (2008) differentiates between the collectivity's internal and the external social capital. The former refers to resources brought to bear from the members: "a collectivity can be seen as a social network with members as actors who bring their resources to bear, so that social capital for the collectivity is reflected in the embedded resources as provided by members"; the latter comprises "collectivity's connections to other collectivities and social units (e.g., organizations and individuals)" and focuses on the "diversity of resources embedded in these other collectivities accessible to the collectivity" (Lin, 2008, p.15-16).

Structural or cultural aspects?

Huber (2009) argues that an important clarification of the network-based approach is that social capital is distinguished from cultural aspects such as trust or norms. Moreover, social networks themselves do not represent social capital, since social capital refers to the resources embedded in social networks (see the following point). This definition is much more specific, differentiates between social phenomena that are part and not part of social capital and thus overcomes the vagueness of social capital concept.

Social capital as networks or resources?

According to the network-based approach social capital is understood in terms of resources actors are able to use through social networks. This means that equating networks with social capital is incorrect: networks are necessary for the access and use of embedded resources, but networks are not identical with resources. What is needed is to specify conditions under which certain network features such as density or openness lead to the capturing of certain resources that generate certain kinds of returns (Burt, 2001; Lin, 2008).

Is social capital certainly benign?

This approach views social capital in a positive light as the contextual attribute that allows individuals to obtain certain outcomes, such as gain wealth, power or reputation, maintain cohesion, solidarity, or well-being (Lin, 2008). The social capital metaphor is that the individuals who do better are somehow better connected (Burt, 2000).

#### 3. Measurement

Measuring social capital is an important but complex task. Since "a proper measurement effort is fully dependent on a clearer definition of what is meant by social capital, and its various possible forms" (Mancinelli and Mazzanti, 2004, p.317), the multiplicity and vagueness of theoretical definitions lead to a variety of empirical methodologies, and to a number of different social capital's indicators. Durlauf (2002, p.22) states that "the empirical social capital literature seems to be particularly plagued by vague definition of concepts, poorly measured data, absence of appropriate exchangeability conditions, and lack of information necessary to make identification claims plausible". Moreover, much of the relevant aspects of social capital are non-material, defying easy measurement or codification.

This section reviews measures of social capital and deals with the main problems that arise from the empirical literature. The focus is on a micro approach to social capital. Indicators are summarized following the distinction between structural and cultural aspects (van Deth, 2008). Even if there is no full consensus on the best proxies to use, the dominant practice is to measure structural and cultural aspects of social capital respectively with voluntary associations and trust (van Deth, 2008).

The density of voluntary organizations is the instrument used by Putnam (1993); additional versions are given by weighting each voluntary organization by the number of contacts the individual has with the organization, or by the importance of the person with whom the contact is formed (Lin, 2008)<sup>5</sup>. As Paldam (2000) pointed out, voluntary organizations constitute one particular type of network, but since there may be some tradeoffs between other networks and voluntary associations, this instrument is likely to be a proxy for social capital as defined by the network definition. Paldam (2000) identifies three main problems with Putnam's instrument: it is difficult to clearly define which associations are voluntary (some organizations may be close to normal business and government organizations), the instrument should be weighted with the intensity of contacts (for example following Lin, 2008), some organizations are non-benign and they should be considered as negative components of social capital.

One of the most popular proxies for the cultural aspects of social capital is trust. Measures of trust are usually obtained through survey data or experimental methods. Many researchers use the World Values Survey (WVS) which measures the size of generalized trust by the following question: "Generally speaking, would you say that most people can be trusted, or that you cannot be too careful in dealing with people?". Trust payoff can be measured using questions such as: "How many of your friends do you think will trust you with a loan?". A more general measure of trust can be obtained through the wallet-test: how many wallets forgotten in public places are handed back.

Many other measures and indicators (direct and indirect) are used in empirical research. Each measure is bound to capture only some aspect of social capital. Consistently, researchers measure social capital with a combination of variables (e.g. Putnam, 1993: participation in associations, electoral turnout, newspaper readership,

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<sup>&</sup>lt;sup>5</sup> Lin's measure can be considered as a proxy for the network payoff definition of social capital, since individuals can obtain more resources if they are in touch with important people.

and other measures of civicness, such as non littering, charity giving) (Guiso et al., 2004). Cote and Healy (2001) suggest that measures of social capital should be as comprehensive as possible in their coverage of key dimensions (networks, values and norms) and should be balanced between the attitudinal/subjective and the behavioural.

Table 1 summarizes the main indicators by aspects of social capital (cultural and structural).

Table 1: Major indicators of social capital

Structural (networks)	Cultural (trust, norms and values)
	Cultural (dust, norms and values)
Informal networks:	Trust:
- social contacts with friends,	- whether most people can be trusted
neighbours, relatives	- how many forgotten wallets are handed back
- household	- corruption
- family beyond the household	
- number of children in the household	Trustworthiness:
	- number of legal proceedings for work disputes
Formal networks:	- number of protests for bank bills and cheques
- number and type of associations or	- number of people reported to judicial
local institutions	authorities by the police
- membership in associations:	
- 'Putnam associations' (sport,	Norms of reciprocity
education, music, arts, church,	Solidarity
charity, voluntary, ecology, human	Subjective well-being
rights and peace association)	Number of blood donors
- 'Olson association' (professional	
associations, trade unions, political	Civil and political society:
parties)	- measure of government inefficiency
	- measure of 'human liberty'
	- measure of political stability
	- measure of political rights
	- measure of civil liberties
	- democratic attitudes
	- voter turnout
	Social integration:
	- social mobility
	- crime rates
	- suicide rates
	- divorce rates
	- youth unemployment rates
	- youth unemproyment rates

Social capital empirical studies suffer from a series of problems. I summarize them into six points, following and integrating Sabatini's (2007) discussion.

#### Vagueness.

As noted above, the vagueness of social capital conceptualization does not enable the development of a unique method of measurement. Empirical studies define indicators of social capital consistent with the specific definition of the phenomenon they give, and with the dimensions they consider.

Contextualization.

Social capital deals with abstract concepts that obtain their meaning within a specific context (van Deth, 2008). Social capital is related to the social, economic and cultural context in which relations, behaviours and attitudes are developed. Similarly, Baron et al. (2000) suggest that the validity of social capital depends on its contextualization. The measures of social capital should be themselves linked to the specific context that we analyze. This makes difficult to identify measures good for every situation.

*Incomparability* 

Vagueness and contextualization imply that it is difficult to compare different studies on social capital.

Aggregation.

The contextual dependency of social capital leads to some problems in the aggregation of micro data. Portes and Landolt (1996) suggest that collective social capital can not simply be the sum of individual social capital. Sabatini (2007, p. 11) underlines that "trust measured through surveys is a micro and cognitive concept: it represents the individuals' perception of their social environment, related to particular position that interviewed people occupy in the social structure. The aggregation of such data creates a measure of macro and social trust which looses its linkage with the social and historical circumstances in which trust and social capital are located".

Indirect indicators.

The nature of social capital means that it is difficult, if not impossible, to measure directly and that for empirical purposes the use of proxies or indicators is necessary (Collier, 2002). Empirical studies which rely upon indicators are rarely supported by direct investigation of the relationship between indicators and the core components of social capital (Stone, 2001). Many researchers measure social capital with its possible outcomes (or the absence of outcomes), according to a functional concept. This leads to tautological interpretations (Stone, 2001, van Deth, 2008), or at least considerable confusions (Ferguson, 2006). Social capital "leads to positive outcomes, such as economic development and less crime, and its existence is inferred from the same outcomes" (Portes, 1998, p.19). Durlauf (2002) suggests that variables used as proxy for social capital may have causal influence on individual behaviour that are

independent of that is meant by social capital. Tautological problems arise when we measure social capital through trust indicators if we agree with those that consider trust, and cultural aspects in general, as outcomes of social capital.

Multidimensionality.

Social capital has a multi-dimensional nature, and each dimension is itself a multifaceted concept. For example, there are different types of social networks (the main distinction is between bonding and bridging social capital), with different effects on socioeconomic outcomes. This makes the evaluation of social capital more difficult and requires a set of various indicators, giving rise to a number of methodological and empirical problems. Many empirical studies focus only on one type of association, and do not consider the combination of different dimensions.

#### 4. Conclusions

The literature review showed how social capital is a vague concept. There are multiple definitions, interpretations and uses of the term social capital. On the one hand this multiplicity contributes to the popularity of social capital for both policymakers and researchers. On the other hand it makes difficult to develop a universal theoretical background that characterize the studies on social capital. The multiplicity of social capital definitions is embodied in the concept itself, in particular according to the Coleman's functional view: social capital is anything that facilitate cooperation between agents and that makes markets more efficient. This leads to a confusing debate and makes difficult to understand the causal effects, because any empirical analysis will find that social capital causes cooperation among agents and improves the efficiency of markets (Sabatini, 2007). According to Huber (2009) a too broad definition of social capital lacks specificity and substance. The danger is that social capital refers to all the possible social phenomena and finally loses its theoretical and empirical force (Tura and Harmaakorpi, 2005). This suggests that, even if social capital lends itself to multiple interpretations, scholars should make an effort to shape more specific definitions of social capital (Mancinelli e Mazzanti, 2004), improving the clarity of the concept. As van Deth (2008) pointed out, it is ambiguity of the definition the main problem in the conceptualization of social

capital. Recently some agreement has been reached about a micro approach<sup>6</sup> to social capital, understanding it as the norms and networks that facilitate collective action (Woolcock and Radin, 2008). Some scholars argue that this is still a too general definition, and "does not restrict social capital to its specific forms, sources or outcomes, but connects to the concept all those social phenomena that serve a certain function" (Tura and Harmaakorpi, 2005, p. 1116). Nevertheless, even considering a micro level and network based approach, there is still a debate between those who regards social capital as the resources that flow through one's network (e.g. Portes, 1998, Lin, 2001), and those who consider social capital as the networks themselves (Woolcock, 2001, 2003).

The conceptual vagueness is reflected in a vague empirical application of social capital. There is not a unique method for the measurement of social capital: a number of different indicators have been used in empirical research, making difficult to compare different studies. Moreover, the operationalization of social capital is made difficult by the problem of separating the core components of social capital from its outcomes. It is not possible to measure directly social capital, and there is debate and controversy over the relationship between indicators and the core dimensions of social capital. Many indicators relate to outcomes of social capital, thus leading to tautological interpretations: "research reliant upon an outcome of social capital as an indicator of it, will necessarily find social capital to be related to that outcome, without empirical means to explain why, or indeed whether, this is so" (Stone, 2001, p. 5). A further issue in the measurement of social capital is the multidimensionality of the phenomenon. This makes the evaluation of social capital more difficult and requires a set of various indicators, giving rise to a number of methodological and empirical problems.

<sup>&</sup>lt;sup>6</sup> Woolcock (2001, p.7) suggests "to refer to macro-institutional issues under a separate banner, calling them 'social capabilities', 'social cohesion' or 'social infrastructure'".

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