Staff Paper

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ABSTRACT (24 pages)

Social capital in the past two decades has emerged as a dominant paradigm in the various social science disciplines. However, its adoption by the different social science disciplines has led to multiple and often conflicting definitions of social capital. Some differences in the definition of social capital can be explained because scientists have included in the definition expressions of its possible uses, where it resides, and how its service capacity can be changed. This paper defends the social capital metaphor by pointing out that social capital has many important capital-like properties including service potential, durability, flexibility, substitutability, opportunities for decay (maintenance), reliability, ability to create other capital forms, and investment (disinvestment) opportunities. Social capital is compared to other forms of capital including cultural capital and human capital.

Key Words: social capital, cultural capital, human capital, physical/financial capital, service potential, durability, flexibility, substitutability, decay (maintenance), reliability, investment (disinvestment)

IS SOCIAL CAPITAL REALLY CAPITAL?

Introduction

The term social capital has taken on so many meanings and enlisted to fight so many battles that it is at risk of becoming the ether that fills the universe. Commenting on the need to refine the definition of the term social capital, Castle wrote: "Unless the social capital concept is used with some degree of precision and in a comparable manner, it will come to have little value as an analytical construct." In what follows, we suggest that social capital's alternative definitions lack precision because they have included expressions of its possible uses, where it resides, and how its service capacity can be changed. We recommend that the definition be limited to what social capital is. Then, in the main part of this paper, we defend the term "social capital" as appropriate and useful to describe resources associated with interpersonal relationships because social capital can claim nearly all of the properties commonly associated with other forms of capital.

We can enhance communication and cooperative research across academic disciplines by limiting the definition of social capital. Within a particular discipline, scientists may want to focus on social capital's applications, residence, or (dis)investment possibilities unique to their field of study. However, these discussions unique to a field of study should not be confused with the definition of social capital, a statement of the form A equals (is) B.

It appears that included in most accepted social capital definitions is a generally accepted kernel that can be used as the basis for a proper definition of social capital. It is our hope that a properly limited social capital definition will save social capital from battles it should not fight and uniforms it should not wear.

Dimensions and Definitions

On April 20-22, 1998, social scientists and applied problem solvers from around the world and across disciplines gathered to define, discuss measures, and suggest applications of social capital. The event bringing problem solvers and scientists together was *Social Capital: An International Conference Bridging Disciplines, Policies, and Communities* sponsored by the Social Capital Interest Group [SCIG] at Michigan State University. At the beginning of the conference, presenters were asked to respond to twelve alternative definitions of social capital proposed by social capital scholars. No one definition of social capital was generally supported. The alternative definitions and average responses to the definitions by conference participants are reported in Table 1.

Perhaps one reason the conference participants could not generally agree on a definition of social capital was that the definitions did not limit themselves to answering the question: what is social capital? Past definitions have included answers to such questions as: where does social capital reside? How can social capital be used? And how can social capital be changed? For example, one definition of social capital is: ". . . the expectations for action within a collectivity that affect the economic goals and goal-seeking behavior of its members, even if these expectations are not oriented toward the economic sphere" [Portes and Sensenbrenner]. This definition appears to combine <u>what social capital is</u> (the expectations for action within a collectivity) with <u>what social capital can be used to achieve</u> (affect the economic goals and goal-seeking behavior of its members).

Table 1.Agreement (Disagreement) with Alternative Definitions of Social Capital
Presented at "Social Capital: Bridging Disciplines, Policies, and
Communities"

	Agree									Disagree
Scale Used	1	2	3	4	5	6	7	8	9	10

Survey Summary

Definition	Definition Summary	No. of Conference Participants Responding to Questionnaires	Mean of Conference Responses	Standard Error of the Mean
Definition 1	Social capital is the expectations for action within a collectivity that affect the economic goals and goal-seeking behavior of its members, even if these expectations are not oriented toward the economic sphere.	<i>n</i> = 55	$\overline{X} = 5.2$	$\sigma_{\bar{\chi}} = .30$
Definition 2	Social capital is information, trust, and norms of reciprocity inhering in one's social networks.	<i>n</i> = 55	$\overline{x} = 3.7$	$\sigma_{\bar{x}} = .31$
Definition 3	Social capital is a variety of different entities having two characteristics in common: some aspect of social structure; and they facilitate certain actions of individuals who are within the structure.	<i>n</i> = 55	$\overline{x} = 5.1$	$\sigma_{\bar{x}} = .33$
Definition 4	Social capital is the sum of resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition.	<i>n</i> = 55	$\overline{X} = 3.8$	$\sigma_{\bar{x}} = .31$
Definition 5	Social capital is friends, colleagues, and more general contacts through whom you receive opportunities to use other forms of capital. Also, social capital is relations within and between firms.	<i>n</i> = 55	$\overline{X} = 4.1$	$\sigma_{\bar{x}} = .30$
Definition 6	Social capital is naturally occurring social relationships among persons which promote or assist the acquisition of skills and traits valued in the marketplace. Social capital is also an asset which may be as significant as financial bequest in accounting for the maintenance of inequality in our society.	<i>n</i> = 54	$\overline{X} = 5.1$	$\sigma_{\bar{x}} = .31$
Definition 7	Social capital is those features of social organizations, such as trust, norms, and networks, that can improve the efficiency of society by facilitating coordinated actions.	<i>n</i> = 53	$\overline{X} = 4.0$	$\sigma_{\bar{x}} = .32$
Definition 8	Social capital is the capacity of individuals to command scarce resources by virtue of their membership in networks or broader social structures.	<i>n</i> = 55	$\overline{X} = 4.1$	$\sigma_{\bar{x}} = .29$
Definition 9	Social capital is accumulated past experience in interpersonal relationships that constrain or stimulate persons' behavior toward other persons, or behavior in matters that affect other persons very directly, in the present.	<i>n</i> = 55	$\overline{X} = 5.1$	$\sigma_{\bar{x}} = .31$
Definition 10	Social capital is an argument in a person's preference function that incorporates the influence of past actions by peers and others in an individual's social network and control system.	<i>n</i> = 52	$\overline{X} = 6.3$	$\sigma_{\bar{x}} = .27$
Definition 11	Social capital is a moral resource including trust and other cultural mechanisms used to define and reinforce the boundaries of particular status groups.	<i>n</i> = 52	$\overline{X} = 5.9$	$\sigma_{\bar{x}} = .32$
Definition 12	Social capital is the potential benefit, advantages, and preferential treatment resulting from one person or group's sympathy and sense of obligation toward another person or group. Social capital also includes the potential benefits, advantages, and preferential treatment that originate from one person's sympathy and sense of obligation toward his or her idealized self.	<i>n</i> = 52	$\overline{X} = 5.0$	$\sigma_{\bar{x}} = .36$

Coleman defined social capital as a variety of different entities having two characteristics in common; namely, some aspect of social structure and ability to facilitate certain actions of individuals who are within the structure. This definition, like the one suggested by Portes and Sensenbrenner, combines <u>what social capital is</u> (a variety of structures) with <u>what social capital</u> <u>can be used to achieve</u> (facilitate certain actions of individual members of the group where the group is defined by some aspect of social structure).

Burt defined social capital as: friends, colleagues, and more general contacts through whom you receive opportunities to use other forms of capital. This definition of social capital combines a statement of <u>where social capital resides</u> (with friends, colleagues, and more general contacts) with <u>what it can be used to accomplish</u> (receive opportunities to use other forms of capital).

Another example of a definition that combines a statement of what social capital is with where it resides is Portes'. He defined social capital as the capacity of individuals to command scarce resources by virtue of their membership in networks or broader social structures. This definition can be separated into a statement of <u>what social capital is</u> (the capacity of individuals to command scarce resources) with a statement of <u>where social capital resides</u> (networks or broader social structures).

Sometimes a definition of social capital combines statements about what gives rise to social capital with what social capital can be used to achieve. For example, Putnam defines social capital as features of social organizations such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions. In this definition, the <u>basis for social</u> capital (trust and norms) can be separated from statements of <u>what social capital can do</u> (improve

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the efficiency of society by facilitating coordinated actions) and <u>where social capital resides</u> (networks).

It appears that once statements of where social capital resides, how social capital can be used, and how social capital is produced are separated from many popular definitions of social capital, what remains defines social capital as service potentials derived from social relations. Consider the following statements about social capital: an expectation for action [Portes and Sensenbrenner], norms of reciprocity [Woolcock], the sum of resources, actual or virtual [Bourdieu and Wacquant], opportunities to use other forms of capital [Burt], an asset that may be as significant as financial bequests [Loury], the capacity of individuals to command scarce resources [Portes], [potential] that constrains or stimulates persons' behavior toward other persons [Bolton], and the potential benefits, advantages, and preferential treatment [SCIG]. It appears that what many scholars and problem solvers mean when they refer to social capital is its potential, much like the potential services available from other forms of capital.

Service potential is an essential quality of most forms of capital. When reference is made to a heating plant or car, the attention is usually directed to the plant's heating potential or the car's potential to provide transportation services. For example, expressions such as "turn up the heat" and "who has wheels" are implicitly referring to potential heating and transportation services rather than to the processed materials combined and energized with a fuel product. When attention is directed to social capital, it appears that attention is being directed to its potential to provide preferential treatment.

Important as service potential is to capital, economists do not generally define capital as a service potential. Rather, capital is defined as the good that is capable of producing other goods

and services. Consider a definition of capital generally accepted by economists. Capital is: "...a commodity itself used in the production of other goods and services. It is a human-made input, such as plant or equipment, created to permit increased production in the future" [Smithson, 111]. Capital in this sense represents an accumulation of foregone consumption, an amount saved for later use. A similar definition of capital defines it as: "...a resource used by a firm in producing goods or services" [Schall and Haley, 820].

Human capital has many of the same properties as economic or physical capital. Fundamentally, human capital emphasizes a surplus value and represents an investment in education and skills that resides in individuals (Johnson, 1960; Schultz, 1961; Becker, 1964). One important difference between social capital and other forms of capital is that social capital exists in a social relationship. Thus, when we talk about social capital, we make reference to the person or persons possessing sympathy, where social capital resides, and other persons who are the object of their caring.

A definition of social capital consistent with the definition generally accepted by economists would substitute for "commodity" the word sympathy.¹ Then, if the residence and object of social capital are included generically, the definition of social capital, adapted to the language used in previous definitions of physical capital, would read:

Social capital is a person's or group's sympathy or sense of obligation toward another person or group [the commodity] that may produce a potential benefit, advantage, and preferential treatment for another person or group of persons beyond that which might be expected in an exchange relationship.

The definition above most closely resembles the one proposed by SCIG. The difference in the definition proposed here is that it equates social capital to a person's or group's sympathy or sense of obligation instead of equating it to the potential for preferential treatment resulting from a person's or group's sympathy.

The Social Capital Metaphor

Not everyone accepts the metaphor of capital to describe relationships of sympathy and sense of obligation that may produce potential benefits.² Reflecting on a social capital workshop sponsored by the World Bank, economist and Nobel laureate Kenneth Arrow urged abandonment of the metaphor of capital and the term "social capital." He emphasized that the term "capital" implied a deliberate sacrifice in the present for future benefits that he claimed was inappropriate to describe social networks organized for reasons other than economic value for the participants. As will be seen below, however, social capital may indeed involve a saving and investment today to obtain future benefits and Arrow's objection seems misplaced.

Baron and Hannon raise another objection to the metaphor of social capital. They argue that to qualify as "capital" an entity must possess an opportunity cost, something that social capital lacks. Woolcock responded to this objection: ". . . much of one's social capital stems from an inherited endowment over which one has little influence-but it is also the case that people can and do make deliberate, hence costly, efforts to increase their social capital . . ." [Woolcock, 46].

The social capital metaphor may suffer because economists and sociologists typically use the term "capital" in slightly different ways. Quoting again from Castle: "Capital in any form qualifies as capital only if it makes humans more productive when they use it in combination with other forms of capital. Sociologists may refer to social capital as 'bad' or 'good' depending on whether it is useful to humans in a given context. The economist probably would not refer to a 'bad' social arrangement as social capital, although it might qualify as an economic institution."³ In this regard, requiring capital to be used for productive compared to destructive purposes is not practical or helpful. Most productive processes involving capital produce both goods and bads. A plant may produce steel (a good) and smoke (a bad). Would you say the plant is not capital because it produces smoke along with steel?

Regardless of whether one agrees or disagrees with the objections to the metaphor of capital and the term social capital, Arrow's recommendation that the term social capital be abandoned comes too late. The calves are out of the barn and into green pastures and not likely to return soon. The term social capital is now firmly entrenched in the language of social scientists. Thus, for now and for some considerable time in the future, the term "social capital" will be in common use among most social scientists if not economists.

Capital-Like Properties of Social Capital

With the term social capital firmly entrenched in the social sciences, it may be appropriate to ask: what does social capital or sympathetic relationships have in common with other forms of capital? To answer this question: "is social capital really capital?" several properties of capital are examined next and compared with properties of social capital as defined earlier in this paper.

Narayan and Pritchett (NP) defend the term social capital by describing social capital's capital-like properties. They begin by defining "capital" as something accumulated which contributes to higher income or better outcomes [p. 3]. Then, they describe five processes in which social capital changes outcomes for the better by facilitating greater cooperation.

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First, increased social capital with its greater degrees of horizontal connections improves governments. Second, increased social capital leads to increased community cooperative action and solves local "common property" problems. Third, increased social capital strengthens linkages among individuals that speeds the diffusion of innovations. Fourth, increased social capital improves the quantity and quality of information flows and reduces transactions costs. Finally, fifth, increased social capital pools risks and allows households to pursue more risky and higher return activities.

NP's list is a helpful discussion of the possible benefits that may accrue from increased social capital. They do not, however, describe the essential properties of capital, particularly physical capital as defined by economists. The essential properties of physical capital goods are: service potential, durability, flexibility, substitutability, decay, reliability, opportunities for (dis)investment, ability to create one capital form from another, and ethical uses. In what follows, we intend to point out that social capital shares all of these essential capital-like properties.

Service Potential. Service potential relates to the essential characteristics of capital goods; i.e., goods to make goods by transforming inputs into outputs. Physical capital is valued because it has the capacity to provide services valued more than the cost of providing the service. Of course, a capital good's service potential depends on the presence of other goods. Examples of physical capital include heating plants with their potential to produce heating services; cars, buses, and planes with their potential to provide travel services; surgical equipment with its potential to supply medical services; and housing with its potential to provide shelter services. This conceptual separation of capital from its service flows and other resources required in the transformation processes allows us to ask what are the processes that transform the inputs into

outputs, and how do capital and nondurable inputs substitute and complement each other in the production of services and goods?

Social capital, like other forms of capital, requires not only sympathetic relationships but other inputs to provide preferential treatment and benefits. Social capital can be combined with other inputs to provide services that meet human needs in four essential areas of human experience. The four service categories include: economic services, social services, validation services, and information services. A description of human needs and the importance of relationships in meeting these needs is a subject for long discussions. The main point emphasized here is that human relationships are required to meet our most basic emotional needs. Human relationships can be prized in themselves and directly utilized much as a refrigerator or other durable good are used by a consumer. Or, relationships can be used to produce other goods much as a machine is used to produce consumer goods. Thus, the services can be both immediate and in the future. Consider the following four service categories supplied by social capital.

<u>Economic</u> services provided by social capital are distinguished from economic services motivated by selfish preferences. Social capital that meets economic needs requires feelings of caring or sympathy that vicariously link the well-being of the person providing social capital to the object of social capital, the person claiming (benefitting from) social capital. The <u>social</u> needs to experience caring is at the root of the human experience and requires personal relationships. The need to be <u>validated</u> is also at once a foundation need that is fulfilled through interpersonal experience. Finally, the need to see through the eyes of others, to have access to <u>information</u> about physical and emotional connections between actions and outcomes, is associated with the human experience. Social capital's potential to provide economic, social, validation, and information services is its main characteristic that identifies it as a form of capital.

Durability. Durability associated with physical capital refers to capital's ability to retain its identity after and during the process of providing services. A tractor after delivering pulling services is still recognized as a tractor with potential to pull and provide transportation. A cow after producing offspring and milk is still recognized as a cow with milk and offspring producing potential. In contrast to durables are *expendables* that lose their identity during their provision of services. For example, seed and fuel are most of the time considered expendables because while providing growing and energy services, they lose their identity. Seeds become plants and fuel becomes energy and neither expendable is recognized for what it was before it provided services.

Social capital possesses different degrees of durability. There may be weak ties capable of producing only a limited amount of services before disintegrating. A causal friend may be willing to provide free transportation a few times but then later be unresponsive to requests. Some forms of social capital are durable almost to the point of being indestructible. These extremely durable forms of social capital are often associated with family connections that remain unchanged even when repeated service extractions are made. (How many dinner and laundry services can children expect before further services are refused by their parents?)

Capital whose service potential is nearly indestructible is called *endurables*. Endurables are little affected by time or use. A fine jeweled watch may keep time for generations. Land, for example, has its service potential nearly unaffected by reasonable use. So it is with social capital. Social capital that resides in family members may be nearly indestructible, an endurable, while

social capital embedded with friends with whom you attend sporting events may be of limited durability.

Flexibility. Flexibility refers to the range and number of services available from a capital source. Some capital forms are designed for a specific use and not applicable to others. In this category, one might think of a specialized medical instrument used to remove cataracts. Or, one might think of keys that only work in one lock. Capital forms whose services can only be used to meet highly specialized needs are called inflexible capital forms. In contrast to inflexible capital forms are flexible capital forms whose services can be used to provide a wide range of services. For example, electric ranges are used mostly for cooking services, but in emergencies may be used to provide heating services in the confined space in which they are located. While cars provide transportation services, they can also be used to produce a wide range of services, but the rate at which transportation services may be varied often ranges from nearly zero to 120 miles per hour.

Like physical capital, social capital may be either flexible or inflexible. Some forms of social capital such as might be available from a sibling can be used to obtain a kidney donation, financial resources such as loans, transportation, information, favorable reviews, support for awards, and companionship on otherwise lonely occasions. One would not expect such a range of services from the bank teller who greets you by name when you conduct your financial business. The teller might provide some preferential treatment, but these would likely be related to the services she or he does in the routine course of her/his work at the bank.

Substitutability. The economic way of thinking asks about complements and substitutes. Tractors provide pulling services in most developed countries, but animals may substitute for these services in many less developed agricultural settings. Barns and silos provide storage services, but trees and tents may substitute for these services in emergencies.

Financial capital may be used to acquire information and several kinds of capital services. Financial capital may also be used to acquire legal services to enforce contracts. However, social capital may be used to obtain services from almost all other forms of capital. Social capital with friends can be used to gain inside information and access to capital at preferential terms of trade. Social capital, particularly in less well-developed markets, is used to reduce transactions costs and enforce contracts.

Decay (Maintenance). Decay (maintenance) refers to the manner in which the service capacity of durables is reduced (maintained). Physical capital's service potential decays mostly through use, the passage of time, or the absence of maintenance. Wear is a natural feature of nearly all forms of physical capital. One might think of a barn that provides storage services. The service capacity of the barn is related to the physical dimension of the facility and the condition of the structure. In this instance, the barn's decay depends on the passage of time and the application of maintenance rather than use, since its decay is unrelated to the number of objects stored. On the other hand, the increasing number and frequency of engine revolutions directly alters the potential of many mechanical durables whose decay depends on use. Finally, some durable's service capacity varies little with time or use, like paintings in a museum (if properly maintained), while other durables such as paper cups may have rapid decay functions.

Social capital, like physical capital, is subject to decay from use, the passage of time, and lack of maintenance and a proper environment. One might develop social capital within a neighborhood that provides valuable social capital services. But when a member of the community moves, at first there are efforts to maintain contact, but eventually the lack of maintenance in the form of face-to-face contacts soon diminishes the strength of the ties and the potential to extract services. On the other hand, former neighbors may move but have their children marry, in which case their social capital is maintained. In other cases, such as family members, the passage of time and the absence of regular face-to-face contacts does very little to diminish the social capital service potential. Finally, sometimes the too frequent request for services may exhaust one's social capital or potential to receive preferential treatment.

Reliability. Reliability concerns the predictability of capital's service delivery. Dependability has two dimensions. These two dimensions include longevity and intensity. For example, a light bulb provides lighting services at a particular intensity. Its reliability mostly deals with its longevity-how often will the light bulb light up? Its intensity, however, is not generally in question. The longevity of light bulbs is particularly important for traffic lights and lights in other sensitive areas such as submarines.

Professional football players may also be considered a form of capital (human capital). One important quality of a football player is his intensity in a particular game. A player whose intensity is widely variable is less valuable than one who continues to provide predictable levels of performance each game.

Unpredictability of intensity or duration usually reduces the value of capital. Moreover, capital forms that are reliable are generally recognized and rewarded in the marketplace. Diehard and Ever Ready batteries (alias the pick bunny) and Honda cars are generally recognized and rewarded for their reliability.

Social capital clearly has a reliability dimension. Some social capital invested in close friends and family members is highly reliable. Other forms of social capital may be situationally dependent. For example, a person who has achieved some significant success may be more generous and willing to provide preferential treatment than a person who has suffered a setback. Sometimes a relationship "gone bad" may unexpectedly end one's social capital. In any case, conversations that begin by asking: "can we ask Jane or Jon for a favor?" are recognizing that social capital has a reliability dimension.

Ability to Create Other Capital. Ability to create other capital forms refers to capital's ability to be used to create the same or different kinds of capital. For example, metal presses are used to create metal products that can be used to create still other metal presses or used to create new forms of capital such as a lathe. We recognize, however, that what is created is distinct from the original capital used in the creation process. Likewise, social capital can be used to strengthen existing levels of social capital or be used to create new forms of social capital. For example, person A might have social capital with person B who introduces him/her to person C. Then, because of their friendship with B, persons A and C develop social capital.

Social capital, like other forms of physical capital, can also be used to create forms of capital different from itself. For example, at some point in time publicly elected officials approved the Morrill Act that resulted in the creation of the Land Grant Universities. Those responsible for creating the Land Grant System were undoubtedly influenced in their action by social capital. However, what they created was something different from social capital. What they created was an institution with resources, rights, and responsibilities and the ability to grant preferential treatment to many individuals. In addition, it became a setting in which much social capital has

been and will be created; e.g., students forming bonds of friendship. Yet, saying that social capital is embedded in the university would not be correct though its resources and rules create advantages and disadvantages for individuals. Social capital continues to reside in individuals, individuals who are capable of caring and experiencing vicarious sensing of another person's wellbeing.

Sometimes caring individuals develop feelings of attachment toward an object whose significance increases because of social capital among these individuals. For example, a picture of a friend has special meaning because of social capital while the picture of someone unknown has little significance. Yet, we would be careful to say that the picture has attachment value, not social capital. Some individuals may have special experiences with hospitals, service groups, and religious or ethnic organizations for which they develop attachment values. They may endow these with funds or other resources to help them in their missions. Nevertheless, the hospitals, service groups, and religious or ethnic organizations are not endowed with social capital, though the charitable act may create in some individuals, social capital.

It is the individuals who provide social capital and our social capital assets are embedded in individuals and systems of individuals. This is not to say that only individuals can provide preferential treatment. Favors may come our way in many different forms, including being at the right time to participate in a sale or avoid an accident, or finding out that one qualifies for a special fund because of one's ethnic background. Being a member of a group may give social capital to an individual even if that individual has no other connection to those delivering benefits.

A collection of students may initially form because of a common interest in a subject matter leading them to register for the same class. Then, because of group projects and synergistic group studies, the class members may develop social capital for each other that may also meet some sociability needs. Another group may form around a common interest in an activity to meet a sociability need. For example, one such group may organize to play bridge. However, this group may strengthen its ties and its social capital by agreeing to form an investment club. Now their group meets their needs not only for sociability but also provides a useful activity (investing) that may further their economic interests (earning returns on their investments). Most service clubs including Rotary, Kiwanis, Elks, and Lions' clubs organize not only to meet their social needs but to provide service to their communities. It is unlikely that these clubs would prosper if their only purpose was to advance their social needs.

Ethical Use. Ethical use refers to the application of one's capital. Ethical questions deal with questions of good and bad or right or wrong. Guns and knives are a form of capital and can be used for purposes generally approved of by society such as skeet shooting and turkey carving, respectively. Alternatively, guns and knives can be used for purposes generally disapproved of by society such as robbing a bank and enforcing threats. Sometimes, capital forms exist for which redeeming uses are hard to discover. Such capital forms include nuclear bombs and E-coli bacteria. In still other cases, unethical uses of social capital relate to creating costs or denying advantages to others without their implied or actual consent.

Most forms of social capital have potential services that can be used ethically or unethically. For example, one may benefit from social capital in the hiring process by having a friend on the inside (a friend in court is worth 10 friends in the courtyard). However, if one's friendship were used to obtain employment in a government work place or work opportunities were denied because of one's ethnic background, this application of social capital would be considered unethical. Thus, social capital, like other forms of capital and non-capital, can be applied equally to ethical and unethical uses.

Investment (Disinvestment) Opportunities. Investment (disinvestment) opportunities refer to one's ability to create (destroy) or acquire (dispose of) capital. Investment (disinvestment) opportunities associated with physical capital are generally recognized. Inputs of cement and steel are combined to make a building. Like physical capital formation, one can invest in getting closer. One can combine inputs like gifts, entertaining, and communication to produce caring by others for you. Social capital is produced as a machine in a similar way that a machine is produced, by combining inputs (in a production function). Social capital is earned through acts of service, gifts, mutually beneficial interactions, discovery of shared values or traits, and kernels of commonalities.

One may inherit some forms of capital such as factories, rings, and paintings. Indeed, most families have determined an inheritance plan to pass on its capital to heirs upon the death of the capital's owners. Like physical capital, one may inherit social capital created by one's family members or friends. For example, friends of my parents may become my friends because of the efforts of my parents. A baby is born into a particular social structure and in particular to a family and may immediately own social capital. This capital is inherited because the parents identify the child as belonging to them. Despite many service withdrawals, the baby and later a small child mostly maintain its social capital. Only when the child grows to independence does the social capital supply show some signs of change.

Physical capital goods can be rented or purchased from their owners. One has a harder time imagining how one could purchase social capital, but on occasions finding examples of charitable donations is possible and services rendered in extreme need that has produced social capital. Routinely, we read of persons who risk their lives to save a stranger and in the process acquired a reliable, endurable, and flexible form of social capital.

The investment (disinvestment) processes used to create (destroy) social capital vary in intensity and durability. The intensity of the social capital investment depends on the intensity of the human relation experience and is related to communication. Intense communication would be face-to-face contacts that occur on a regular basis. Less intense communications are those that occur periodically through a medium. Communication by phone, mail, E-mail, and messages passed through a third party illustrate this later form of communication. The intensity of communication may also depend on the relationship between those communicating. Face-to-face communication between strangers is likely less intense than face-to-face communication between a husband and wife, a priest and penitent, and a parent and child. Finally, the intensity of social relations may be a function of the purpose for the communication. When the purpose of the communication is to produce, i.e., enhance one's economic position, validate or be validated, to exchange information, or to express caring, the intensity of the communication is different.

When we say there are different forms of social capital or that social capital has changed, what do we mean? We mean that some social capital can be used for economic advantages, some for social fulfillment, some for validation, and some for information. When we say it has changed, we may mean that social capital's service potential, flexibility, ethical use, decay pattern, reliability, or its ability to create other capital forms has changed.

Cultural Capital

A particularly important complement to social capital is cultural capital. Suppose that in a particular culture that parents teach their children to return lost objects and always to tell the truth. In addition, assume that because of the parents' social capital with their children, the children also adopt the values of returning lost objects and always telling the truth. Visitors to this culture might find this form of cultural capital particularly helpful in setting up a business and if pressed could even place a dollar value on the cultural capital to which they have access.

It is useful to distinguish these learned and internalized behavioral norms from social capital. A person can return lost objects from a learned sense of commitment without any (or much) sympathy with the owner. Amartya Sen distinguishes sympathy from commitment. The person enmeshed in cultural capital may not even consider alternative behavior and be little influenced by thoughts of what would happen if the norm were not implemented. When cultural capital is widely shared, it increases the opportunities for reinforcement and the generality of benefits or what Fukuyama calls the "radius of spontaneous cooperation."

When groups of individuals form certain cultural norms accepted by the population, that is they have cultural capital, these may sometimes substitute for personalized social capital. When a person has access to cultural capital that gives him/her honest answers and the return of lost objects, the person may not need to depend on personalized forms of social capital to gain access to reliable information and lost objects. When these facilitating cultural norms are absent, individuals may need to depend on more personalized forms of social capital.

Cultural capital may also provide the kernels of commonality essential for the development of social capital. Agreement on cultural values and norms suggests an absence of conflict between persons in a relationship. Beginning with an agreement on cultural norms and values, cultural capital may provide the opportunities to find other kernels of commonality and develop synergistic activities which increase individual investments in social capital.

The main point here, however, is that social capital can be used to create other social capital assets and create still different forms of capital, including cultural. In addition, social capital and other forms of capital can substitute for and complement each other.

Conclusions

Our purpose in this essay is not to assert guardianship of the term "social capital." We have our preferred definition which places social capital within a group of social relationships which are substitutes and complements for each other and other forms of capital. But the main purpose of the essay is to explore the utility of the capital metaphor by asking if social capital has the following features of physical capital: service potential, durability, flexibility, substitutability, decay, reliability, capacity for investment and disinvestment, and ability to create other forms of capital.

We offer several distinctions which may facilitate study of where social capital comes from and what it does. These include the following: separation of the source or motive of social capital from its services (what it does); separation of sympathy from commitment (cultural capital and norms); and separation of the motive derived from sympathy from the motives of narrow selfenhancement.

We close with our preferred definition of social capital which calls attention to a heretofore much neglected motive for behavior:

Social capital is a person's or group's sympathy or sense of obligation toward another person or group that may produce a potential benefit, advantage, and preferential treatment to that other person or group of persons beyond that which might be expected in a selfish exchange relationship.

Endnotes

- 1. Sympathy as used here is consistent with the definition found in *Webster's Ninth Collegiate Dictionary*; namely, sympathy is an affinity, association, or relationship between persons or things wherein whatever affects one similarly affects the other.
- 2. Woolcock has identified several other names for a concept similar to social capital including "intangible assets" [Veblen]; "social energy" [Hirschman]; "social capability" [Ohkawa and Rosovsky]; "sociability" [Hirschman]; and "moral resources" [Hirschman], to name a few.
- 3. Castle, Emery N. "A Conceptual Framework for the Study of Rural Places," *AJAE*, Vol. 80, No. 3, August 1998, p. 625.

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