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Social Capital and Poverty Reduction: Toward a Mature Paradigm

“No man is an island entire of itself; every man is part of the main . . . Any man’s death [and poverty] diminishes me because I am involved in mankind, and therefore never send to know for whom the bell tolls; it tolls for thee” (John Donne, English Poet, 1573-1631).

Introduction

The purposes of this paper are: (1) to introduce the social capital paradigm; (2) to present evidence that social capital has an important role in poverty reduction; and (3) to suggest several policy prescriptions for building and using social capital to reduce poverty.

The social capital paradigm includes social capital, networks, socio-emotional goods, attachment values, institutions, and power. Social capital is a person or group’s sympathy for others. Social capital resides in sympathetic relationships that can be described using networks.

One reason to value social capital is because it can produce economic benefits and if neglected, economic disadvantages. Another reason to value social capital is because it can be used to produce socio-emotional goods that contributes to a country’s socio-emotional health. Sometimes socio-emotional goods become embedded in objects. When this occurs, the meaning and value of the object change. The change in the value of an object produced by embedded socio-emotional goods is the object’s attachment value.

Individuals exchange both physical and socio-emotional goods. Institutions are the rules that order and give meaning to exchanges. Institutions with high attachment values are more likely to be observed than those whose compliance depends on economic incentives or threats. Finally, power, the ability to influence others, depends on one’s resources, including one’s social capital.

In most personalized transactions, persons exchange both socio-emotional goods and physical goods and services. Moreover, the relative amounts of socio-emotional goods and physical goods and services exchanged will alter the levels and terms of trade when measured in physical units. Since one’s ability to include socio-emotional goods in exchanges for physical goods and services depends on one’s social capital, the terms and levels of exchange of physical goods and services will be influenced by the transacting party’s social capital. Those with high levels of social capital will have advantages over those who lack social capital because they can exchange both socio-emotional goods and physical goods and services. Furthermore, since social capital alters the terms and levels of trade and the terms and levels of trade influence the distribution of incomes derived from trades, then social capital also has an important influence on the distribution of household income and poverty. Some evidence suggests that the distribution of social capital in networks and the distribution of household incomes are connected.

Those who supply social capital internalize changes in the well-being of those who are the objects of their sympathy. As a result, those who have social capital have the potential to receive

preferential treatment, including the opportunity to exchange on favorable terms, to receive gifts, to have their transaction costs reduced, and to be insulated from opportunistic actions.

As social capital increases, one's sympathy and concern for others increases and may produce the following effects. First, one may be more willing to invest in high exclusion cost goods (sometimes called public goods). Every society must incur some costs to provide their citizens with goods and services which are costly to exclude anyone from their use. These goods may include education, law enforcement, some health and transportation services, sanitation, food safety, defense, and environmental protection. In a social capital-rich country in which incomes are relatively equal and in which citizens take an interest in each other's welfare, public goods are more available and their benefits more evenly distributed than in countries in which social capital is narrowly distributed.

In social capital-poor countries with significant inequalities and poverty, the costs of public goods are often concentrated while their benefits are diffuse. This condition often leads these countries to under-invest in public goods and for those who are wealthy to substitute private goods for public ones. For example, among the wealthy, private guards substitute for adequate public protection services. Bottled water substitutes for a potable water system. Private schools and tutors substitute for public schools. Land Rovers substitute for adequate roads. Littered highways and polluted streams substitute for a public sanitation service.

As a country's collective social capital increases, its institutions are more widely accepted and the ability to trade and exchange is enhanced. In contrast, in countries with diminished and disconnected networks of social capital, the formal institutions that apply generally are replaced with informal ones that depend on personalized relationships and these reduce the number of exchange possibilities. Moreover, dependence on informal institutions often produces corruption and unequal distribution of benefits. In the complete absence of formal institutions, orderly exchange collapses.

Social capital theory suggests that as social capital increases within networks of transacting partners, the disparity of benefits decreases and the average level of benefits increases. In part, this inverse relationship between disparity of income and average income results from terms of trade in social capital-rich networks which favor the disadvantaged and reduce disparity, from increased investments in public goods which provide opportunities independent of one's income, and from societal rules among those who share social capital which provide more nearly equal opportunities.

We have participated in studies of U.S. states and communities with U.S. states that have confirmed the general conclusion that average income levels and disparity of incomes are inversely related (Robison and Siles; Robison et al., 2000). Others have found similar results in international studies, that as average income increases, poverty rates decline (Deininger and Squire; World Bank, p. 48). The important lesson from these studies is that increasing average income and decreasing inequality and poverty rates are complimentary, not competitive goals that require attention to economic policies and opportunities to invest in social capital.

While it is clear that social capital has an influence on poverty, it is just as clear that poverty has an influence on social capital investments. Some social capital scholars have suggested that social capital is what we invest in on the way to some other activity. If this is true, then poverty influences the formation and investment of social capital. Transactions in which social capital can be acquired

often depend on having resources to exchange. If the poor lack these resources, then they will participate in fewer exchanges than the wealthy and therefore fail to acquire social capital resources as well as the benefits from exchanges of physical goods and services. Examples of activities in which the poor may be excluded include opportunities to attend private schools, social events in which wealthy and social status are required, exclusive clubs and political events, and in some cases religious worship.

The main theme of this paper is that efforts to reduce poverty and inequality and efforts to invest in social capital are interdependent. Efforts to reduce poverty will have a positive influence on a country's social capital because separateness will be reduced. In addition, efforts to invest in social capital that connects people who were formerly disconnected will likely reduce income inequality and poverty that maintained separateness.

Why Emphasize Social Capital and Poverty?

The reason for emphasizing the connections between social capital and poverty are two-fold. The first reason for emphasizing social capital and poverty reduction is that social capital is an important resource that if properly managed can be used to reduce poverty. In some instances, development efforts have ignored the role of social capital and as a result, we believe their efforts have been less successful than possible. Of course, we recognize that other forms of capital are necessary for poverty reduction. However, the lesson of the last several decades is that the productivity of physical, financial, human, and natural forms of capital depends on social capital. The second one is that social capital is an important resource contributing to a country's socio-emotional health. When inadequate levels of social capital exist, the poor often suffer a lack of socio-emotional goods. When the poor have an opportunity to express themselves, they describe their lack of social capital from which socio-emotional goods are derived as one of their major deprivations. Observed World Bank researchers in Egypt, "[Poverty] drives the poor to exclude themselves from the surrounding social networks. . . The maintenance of relations requires money . . . People who are deprived or excluded do not have the material means to live with the rest of the population."¹

Perhaps the need for a focus on social capital as a resource for poverty reduction and socio-emotional health can best be illustrated with an analogy. The movements of the planets are influenced by the location and mass of other celestial bodies. In the past, when the movements of a planet have been unpredictable, it has been because of the influence of an unobserved celestial body. For example, the planet Uranus was discovered in 1781 by William Herschel.² Later it was observed that the orbital path of Uranus varied from the one predicted and this led scientists to discover the planet Neptune. Neptune, as scientists discovered, was exerting an unobserved effect on Uranus. We believe that development policies and theories of poverty reduction have often been less successful than expected because they have ignored the influence of social capital.

Conference Questions

To suggest that social capital plays an important role in poverty reduction and socio-emotional health raises many questions such as:

! What is social capital and is it really capital?

- ! What is the social capital paradigm?
- ! Who are the poor and how are their conditions related to social capital?
- ! What is the evidence that social capital can be used to reduce poverty?
- ! What policy prescriptions are suggested by the social capital paradigm?

The remainder of the paper is organized around the previously listed questions. The major section headings list the questions and the body of each major section consists of our answers to the questions.

What Is Social Capital and Is It Really Capital?

The earliest known use of the term social capital in academic circles was by Hanifan in 1916. More recently, several scholars have contributed to the popularity of the term and concept, including Bourdieu, Coleman (1988), Fukuyama, Narayan, Portes, Narayan and Pritchett, Putnam, and Woolcock. Even before these scholars wrote about social capital, many social scientists were aware of the concept, even though they may have called it something else. For many, social capital is like old wine in a new bottle, an old concept dressed up in a new name. What is different now is that now many social scientists and problem solvers recognize their shared interest in social capital and are talking about it with each other. This conference is an example of the interest in social capital shared by persons with diverse backgrounds.

As scientists and practitioners from different disciplines and problem areas have shared their applications and understandings of social capital, a richer paradigm with increased usefulness has emerged. The increased usefulness of the social capital paradigm has been illustrated by its applications to such diverse topics as educational achievements, health care, crime reduction, investment in public goods, customer retention, advertising, community development, economic growth, and poverty reduction.

One predictable outcome of social scientists and practitioners from diverse backgrounds sharing a common paradigm was the emergence of different definitions of social capital (Portes; Woolcock). Nevertheless, the different definitions that have emerged are similar enough to permit us to communicate about the social capital paradigm and its application with shared understanding. The introduction of the social capital paradigm in this paper is intended to provide a common vocabulary of social capital concepts that will aid efforts to communicate across different disciplines and different practical backgrounds.

The main conflicts among the definitions of social capital include:

- ! What some call social capital others consider to be manifestations or products of social capital.
- ! Some consider social capital to be a micro concept. Others believe it is a macro concept.
- ! Some equate social capital to concepts such as institutions, norms, and networks, while others prefer to distinguish these separately as part of the social capital paradigm.
- ! Some include the location of social capital in such units as civil society, communities, and families in its definition. Others argue that the location of social capital does not belong in its definition.

We define social capital as *a person or group's sympathetic feelings for another person or group. Sympathetic feelings may include admiration, caring, concern, empathy, regard, respect, sense of obligation, or trust for another person or group.*

Our definition equates social capital to sympathy because sympathy is the essential resource required for interpersonal transactions and social power. According to Sally (2000: 575), "If by social capital we mean those assets grounded in and valuable to social interaction, sympathy, again, is the essential personal process. . . ." Cooley (p. 107) claims that sympathy is a requisite to social power and that without it, man is a mere animal, not truly in contact with human life, and because he is not in contact with human life, he can have no power over it.³

David Hume described the importance of sympathy in his *A Treatise of Human Nature*: "The minds of all men are similar in their feelings and operation; nor can any one be actuated by any affection of which all others are not in some degree susceptible. As strings equally wound up, the motion of one communicates itself to the rest; so all the affections readily pass from one person to another, and beget corresponding movements in very creature" (p. 576).

Sally (2002: p. 3) cites several authors to make the point that sympathy leads to an enlarged self-interest. Sally writes that sympathy produces relationships in which self-interest is "undivided" (Merleau-Ponty), "merged" (Davis et al.), or "overlapping" (Aron et al.). Cooley (p. 115) writes: "He whom I imagine without antipathy becomes my brother. If we feel that we must give aid to another, it is because that other lives and strives in our imaginations, and so is a part of ourselves. . . . If I come to imagine a person suffering wrong, it is not "altruism" that makes me wish to right that wrong, but simple human impulse" (quoted in Sally, 2002: 3).

Edgeworth was the first economist to postulate a specific utility function incorporating sympathy. He proposed that agents maximize their own utility plus the utility of another weighted by a coefficient of sympathy (p. 53n, quoted in Collard). The coefficient of sympathy reflects the degree of "overlap" between the expanded self and the other. Sally (2000) used this linear utility function to analyze Prisoner Dilemma games when sympathy exists between players. Other extensions of the model in economics have been made by Becker (1974), Bruce and Waldman, Montgomery, Rotemberg, Robison and Hanson, and Robison, Myers, and Siles.

Adam Smith defined sympathy as "our fellow-feeling with any passion whatever" that arises from "changing places in fancy with the sufferer" (1759, p. 6) and suggested a basis for determining the coefficient of sympathy or what some now call the "social capital coefficient." Smith thought that sympathy decayed within the extended family as the blood ties thinned. He declared that we can sympathize more readily with friends than with acquaintances, and more easily yet than with strangers. Hume had a similar metric in mind when he expressed his view that "We sympathize more with persons contiguous to us, than with persons remote from us: With our acquaintance, than with strangers: With our countrymen, than with foreigners" (p. 581).

Regarding the ubiquitousness of sympathy, Sally summarizes: "[T]he urge to identify with another is embedded in our social natures, and insofar as we are impelled to succeed within a social structure, the motivation to sympathize will be heightened. We have the ability to read and predict (or, at least, to generate the belief that we read and predict) people's thoughts and feelings both because the basic

consistency of the human constitution is such that similar situations and stimuli cause the same internal reactions (Hume's strings), and because our thoughts and feelings are linked with visible, comprehensible signs. . . Finally, as we shall see further on, the belief that we can read the mind of another and have our own mind read may be self-fulfilling, especially within the interaction order. In sum, sympathy is an integral to social interaction and person perception as sight is to visual perception" (Sally, 2000, p. 572).

Social capital has been criticized by some who claim that it is not really capital, because there is no one definition that all scientists and practitioners accept, and because it cannot be measured (Arrow; Solow). However, these criticisms are the same ones that can be made of all other forms of capital. For example, there is no one accepted definition of physical capital just as there is no one accepted definition of social capital. Finally, we have found measuring the service potential of social capital to be no more difficult than measuring the service potential of such diverse forms of physical capital as cars, houses, factories, and personal items.

We consider social capital to be capital because it meets what most consider to be capital requirements. Social capital has the potential to provide services and still maintain its identity (we can ask a friend for a favor and still preserve our friendship). Social capital is distinct from its services (sympathetic feelings of friends are distinct from the favors they may provide). Social capital is durable (we can have friends for long periods of time and sometimes for life). Most consider the potential services of social capital to be valuable (we value the validation and caring exchanged between friends and willingly make costly efforts to maintain them). Social capital is flexible (we find the services of friends valuable in a variety of settings). Social capital is partly fungible (we may ask a friend to help our friend whom he/she does not know).⁴ And, social capital sometimes substitutes or complements other forms of capital (our friends may help us improve the services we derive from other forms of capital). Many associate the service potential of physical capital with its price. We have sometimes associated the service potential of social capital by observing differences in prices of physical goods. For example, the value of one's social capital could be inferred by the difference between the prices a seller would offer to sell land to a friend and a stranger (Robison, Myers, and Siles).

In essence, social capital is a well-defended capital concept that has every right to a place in the capital pantheon that includes other forms of capital such as physical capital, financial capital, human capital, cultural capital, and natural capital (Robison, Schmid, and Siles).

One question frequently asked about social capital is, where does it originate? We believe that social capital originates with shared traits called kernels of commonality. Kernels can be either earned or inherited. Kernels, we believe, are necessary for social capital to develop. Examples of inherited kernels include gender, age, genealogy, nationality, native language, and physical characteristics, to name a few. Examples of earned kernels include education, acquired objects, memberships in clubs, civic organizations, and teams, hobbies, places visited, and political and economic views.⁵

Social capital may exist in a latent form among people who share kernels of commonalities but who have not discovered them in each other. Converting latent social capital into active social capital requires interactions in which the shared kernels are discovered. In other cases, social capital can be created in the process of growing earned kernels. For example, students with many diverse

backgrounds may attend the university and as a result of the shared experiences create an earned kernel which becomes the basis for their social capital.

The definition of social capital presented in this paper suggests varying kinds and intensity of sympathetic relationships. For example, one type of social capital is based on affection and caring. Another type of social capital is based on feelings of collegiality and mutual goodwill that might exist between persons of equal status and resources. Finally, another type of social capital is based on feelings of respect or awareness that may exist between persons in asymmetric relationships of power and influence. To distinguish between kinds of social capital, we define bonding, linking, and bridging social capital.⁶

Bonding social capital (think of an intense commitment that may be solemnized with a bond or pact) exists in socially close relationships. It is most often based on inherited kernels or kernels created out of lifetime commitments and frequent personal contact. Bonding social capital can be characterized by intense feelings of connectedness that may include feelings of caring, affection, and concern as might exist among family members, committed couples, long-time business partners, or members of an oppressed minority.

Linking social capital (think of links in a chain that are of the same size and strength and that share the same stress) exists in semi-socially close relationships and is most often based on earned kernels sometimes created out of moderate-term commitments. Linking social capital can be characterized by moderately intense feelings of connectedness such as respect, trust, and collegiality as might exist among colleagues, co-workers, persons who perform similar tasks or share similar responsibilities, and members of the same club, community, or athletic team.

Bridging social capital (think of a bridge that connects two different bodies of land that differ in size, resources, and populations) exists in asymmetric relationships between persons with few shared kernels, limited personal contact, and often between persons with significant differences in owned resources. Bridging social capital can be characterized by asymmetric feelings of connectedness that might exist between a boss and an employee, a teacher and a student, a famous person and a fan, a leader of a country and a citizen of the country, a political official and a constituent, and between persons alive today and persons from the past.

The stability of one's investments in social capital with persons of similar resources is related to the symmetry of relationships. If persons in a social relationship provide each other different levels of social capital, then the person who is the object of the greater social capital may exploit the relationship. This exploitation, however, usually leads to a reduction in the social capital of the exploiter that continues until symmetric levels of social capital exist in the relationship. An exception to the requirement for symmetric relationships may be bridging relationships in which unequal social and physical resources permit asymmetric relationships to persist. An example of a persistence asymmetric relationship is one that may exist between loving parents and a spoiled child who has little regard for the welfare of his/her parents (Becker, 1981).⁷

One reason asymmetric relationships may exist in bridging relationships is because persons holding unequal levels of social and physical resources may often have unequal desires to invest in social capital. Those in resource-rich positions may be reluctant to increase the social capital they provide

to those in resource-inferior positions because it may obligate them to provide resources on preferential terms. On the other hand, those in resource-inferior positions may desire increased social capital investments with the wealthy because with increased social capital, their access to resources improves.

Finally, completeness requires that we address the negative form of social capital, feelings of antipathy. Antipathy frequently results from the absence of shared kernels and leads to conflicts over economic outcomes, values, power, and information. This paper defines negative social capital as *a person or group's antipathy for another person or group. Antipathy may include feelings of disgust, lack of concern, hostility, disregard, disrespect, lack of responsibility, or mistrust for another person or group.*

The consequences of negative social capital include a lack of sharing, unwillingness to provide aid or engage in mutually beneficial exchanges, acts of exclusions, fraud, discrimination, and war.⁸ If sympathy derives added benefits from constructive efforts to aid a friend, antipathy receives satisfaction from hurting an enemy even if one is made worse off in the effort.

Social Capital and Terms of Trade. Increasing evidence supports the conclusion that social capital alters the terms and level of trade. Dawes, McTavish, and Shaklee found that when participants in public good experiments were allowed to talk to each other, they cooperated 72% of the time. In contrast, when the participants were required to make their decisions anonymously, they cooperated only 31% of the time. Frey and Bohnet reported that other-regarding behavior increased from 12% to 78% when discussions were allowed before the Prisoner Dilemma games were played. Similarly, other-regarding behavior increased from 26% to 48% when discussion was allowed before Dictator games were played. Frey and Bohnet conclude from their studies that "When individuals communicate with each other, situations of conflict are mitigated because the extent of 'other-regarding' behavior increases. The persons involved tend to act less egotistically and take the interest of the other discussants more into account. In a Prisoner's Dilemma situation, individuals are prepared to contribute to the common good by acting more cooperatively, that is they behave less like free-riders" (p. 104).

Robison and Schmid found that used cars were discounted by as much as 14% to down on their luck relatives, not at all to strangers, and nasty neighbors would be charged a 23% premium. Siles, Robison, and Hanson found that a positive relationship between bank employees and bank customers insulated banks from CD rate competition. Robison, Myers, and Siles found in a survey of 1,500 Midwestern farmers that farmland sales to family and friends would be discounted by 8% and unfriendly neighbors would be required to pay a premium of 16% to make the purchase. Perry and Robison found that the very best land in Linn County, Oregon is most likely to be traded among family members. Furthermore, they found that a stranger buying an 80-acre parcel of Class II nonirrigated farm land through a realtor was projected to pay more than 20% for the land than a neighbor.

The implications of social capital include:

- ! Persons or groups have social capital when they are the objects of another person or group's sympathetic feelings.

- ! Persons or groups provide social capital when they have sympathetic feelings toward another person or group.
- ! Those who have social capital have access to resources from social capital providers on preferential terms compared to what might be expected in arm's-length relationships.
- ! Increases in social capital promote cooperative actions, alter terms and levels of trade, encourage exchanges, reduce free riding, internalize externalities, and increase investments in public or high exclusionary cost goods among individuals and groups who possess social capital.
- ! Social capital leads to the creation of and support of formal and informal institutions, and networks among those with social capital.
- ! Social capital within a group may lead to discrimination and exclusion of persons or groups not in the group.
- ! Social capital within one group may lead some individuals or groups to act in ways that undermine societal norms and institutions that create public costs for the benefit of the few members of their social capital-rich networks.

What Is the Social Capital Paradigm?

A paradigm is a description of a subject that includes definitions, identification of and description of variables, and expected cause and effect relationships. As paradigms mature, the proposed view of the subject becomes generally accepted by experts in the field. A mature paradigm can facilitate cooperative action in a particular area because it reduces conflict and the cost of obtaining agreements. The social capital paradigm describes the influence of relationships on social, emotional, and economic transactions and contains concepts drawn from nearly all of the social sciences.

The importance of the social capital paradigm is not that its individual elements are altogether new, although some may have new names, but that in the process of bringing the various elements of the paradigm together and examining their interdependencies, we have learned much more than when the elements of the paradigm were studied independently. Furthermore, by bringing the different elements of the social capital paradigm together, we improve our ability to communicate across disciplines and different practical backgrounds. This improved communication made possible by a shared vocabulary allows persons from different backgrounds to work together on the same problem. For example, we now know much more about poverty and poverty reduction because of the social capital paradigm than we knew previously when it was studied only from the perspective of economics or from the perspective of some other discipline.

The elements of the social capital paradigm, besides social capital, include socio-emotional goods, attachment values, networks, institutions, and power. Each of these elements are examined next.

Socio-emotional goods. Self-awareness and self-regard are essential for human socio-emotional and physical well-being (Whetten and Cameron). Carl Rogers suggested that we all have a basic need for self-regard, which he found to be more powerful in his clinical cases than physiological needs. Homans writes: "All of the evidence suggests that for many men social approval is a valuable reward, and that it is difficult to satiate them with it" (p. 457). Hayakawa has asserted that the first law of life is not self-preservation, but self-image preservation. Maslow noted that: "We tend to be

afraid of any knowledge that would cause us to despise ourselves or to make us feel inferior, weak, worthless, evil, shameful” (p. 57). Harris observed that self-knowledge is mostly gained in social settings that depend on feedback from others.⁹

Socio-emotional goods are expressions between persons that validate, express caring, or provide information that increase self-awareness and self-regard. Because socio-emotional goods satisfy essential human needs for self-awareness and self-regard they are valued in exchange and may sometimes be exchanged for physical goods and services. Furthermore, exchanges of socio-emotional goods are the primary means for investing in social capital.

One of the important implications of socio-emotional goods is that they are objects of choice that influence the allocation of resources. In describing the choices between socio-emotional goods and other goods, Elster observes: “. . . the claim is not that the emotions [socio-emotional goods] fully determine choice, or that there is no tradeoff between emotional rewards and other rewards. Rather, it is that the tradeoff itself is modified by one of the rewards that is being traded off against the other” (p. 73).

Early economists recognized the importance of socio-emotional goods or what Becker (1974) calls social income. Nassau Senior, an early classical economist, wrote that the desire for distinction “is a feeling which if we consider its universality, and its constancy, that it affects all men and at all times, that it comes with us from the cradle and never leaves us till we go into the grave, may be pronounced to be the most powerful of all human passions” (quoted by Marshall, p. 87). Hochschild described industry efforts to produce socio-emotional goods such as expressions of caring for airline passengers or “emotional work.”

Despite the early attention to the importance of social relations, as the theory of consumer demand began to be formalized, the attention to concepts like socio-emotional goods received less attention. Becker (1974) describes the process of transition away from an interest in social income or socio-emotional goods: “As greater rigor permeated the theory of consumer demand, variables like distinction, a good name, or benevolence were pushed further and further out of sight. Each individual or family generally is assumed to have a utility function that depends directly on the goods and services it consumes” (p. 1065).

Socio-emotional goods deserved to be included in exchange theory because almost any personalized exchange of physical goods and services also includes an exchange of socio-emotional goods. For example, a business person may conduct a financial transaction at a bank and in the process earn financial rewards. But if the bank staff also provide friendly service that validates the business person’s self-regard, then the bank has provided its customer both financial services and socio-emotional goods that are also valued. Banks generally recognize that they can increase their customers’ loyalty by providing them both financial services and socio-emotional goods (Siles, Robison, and Hanson).

The production of socio-emotional goods requires social capital (Robison, Schmid, and Barry). Thus, the pattern of exchanges that include both physical goods and services and socio-emotional goods will be influenced by the distributions of social capital. In addition, the terms of trade will depend on the relative amounts of physical goods and services and socio-emotional goods offered

in exchange. In some cases, a physical good may be offered in exchange for only socio-emotional goods or increased social capital. Such might be the case of a gift offered to a person on a special occasion such as a birthday or an anniversary. Finally, because socio-emotional goods may substitute for other goods in an exchange, they may take on the role of currency. Persons with social capital may substitute socio-emotional goods for currency in an exchange and reduce the amount of financial capital required to complete their transactions. To illustrate, friendly neighbors frequently borrow such items as eggs, sugar, and lawn mowers in which physical goods are exchanged for social capital and socio-emotional goods.

Terms of trade are often described in terms of physical goods and services and financial capital exchanged. However, when socio-emotional goods are included in an exchange, the terms of trade measured in physical goods and services and financial capital exchanged are altered, depending on the social capital of the transacting agents. For example, when agents share bonding social capital, the relative importance of socio-emotional goods included in an exchange will be higher than when agents share linking social capital. Moreover, symmetry in the relative amounts of socio-emotional goods and physical goods and services exchanged is more likely in the presence of bonding or linking social capital. Table 1 summarizes how terms of trade may be influenced by the different types of social capital.

Table 1. A description of exchange possibilities with bonding, linking, and bridging social capital between persons A and B.

	Person A provides person B mostly socio-emotional goods	Person A provides person B mostly physical goods and services
Person B provides person A mostly socio-emotional goods	Transactions of this type often require <i>bonding social capital</i> .	Transactions of this type often require <i>bridging social capital</i> .
Person B provides person A mostly physical goods and services	Transactions of this type often require <i>bridging social capital</i> .	Transactions of this type often occur between persons with <i>linking social capital</i> or may occur between strangers if formal institutions exist to organize the transactions.

The economic implications of including socio-emotional goods in exchanges are significant. Trading patterns of physical goods and services do not necessarily follow patterns that maximize physical efficiency or profits, nor are they likely to eliminate poverty without changes in the distribution of social capital. Moreover, patterns of trade predicted by the Coase Theorem that predict the formation of trade along economic efficient patterns may not be observed (Kahneman, Knetsch, and Thaler).

In relationships characterized by social capital, socio-emotional goods are produced by acts of cooperation, gift giving, information sharing, exchange of supportive information, and shared resources. In arm's-length or in hostile relationships, persons attempt to earn socio-emotional goods

through conspicuous consumption, exclusion, and competitive acts designed to establish rank and to control and reallocate resources (Veblen). While these acts may produce some socio-emotional goods for winners, they inevitably produce socio-emotional bads for the losers who may respond with feelings of increased antipathy and resolve to disadvantage the winner in some future contest. The essence of conspicuous consumption and other ranking activities is to reduce social capital of transacting parties by demonstrating the absence of shared kernels.¹⁰

One of the challenges of poverty reduction is that it requires not only an improved distribution of resources, but it also requires changed relationships between the poor and the wealthy. Inequality and antipathy are companions of the poor and the wealthy. Those with antipathetic relationships are less likely to exchange resources because their exchanges include negative socio-emotional goods and increase the amount of financial capital required to complete the exchange. As a result, exchanges between the antipathetic often are mutually disadvantageous. Examples include litigation, competitive acts intended to tarnish the reputation of another, blocking actions intended to exclude another person from resources, and finally violent acts that include war and personal injury.

Some implications of socio-emotional goods in the social capital paradigm follow:

- ! The value of an exchange can be increased by including socio-emotional goods. However, because socio-emotional goods depend on social capital, those with social capital are more likely to exchange than those lacking social capital, all other things equal.
- ! Since trades are facilitated by one's social capital that can be used to produce socio-emotional goods, patterns of trade reflect investments in social capital.
- ! Socio-emotional goods may substitute for money and physical goods in an exchange. As a result, the monetary price of an object in an exchange may fail to reflect its full value measured in monetary units. Furthermore, altering the proportion of socio-emotional goods included in an exchange will alter the terms of trade measured in monetary units.

*Attachment values.*¹¹ Sometimes socio-emotional goods become associated with or embedded in objects such as pets, poems, photos, places, promises, personal items, traditions, and laws. As socio-emotional goods become embedded in or associated with objects, they change the meaning and the value of the object. Attachment value is the change in an object's value because of socio-emotional goods embedded in it. Persons who value the socio-emotional goods embedded in an object likely share attachment values. Persons who do not value the socio-emotional goods embedded in an object are unlikely to value the object for its attachment value.

Closely related to the concept of attachment value is what Thaler referred to as the "endowment effect," the increased value of a good to an individual when the good becomes part of the individual's endowment. In a series of carefully constructed experiments, Kahneman, Knetsch, and Thaler (KKT) demonstrated that the value of objects such as coffee mugs, pens, and binoculars increased for individuals once they were given ownership. KKT associated the increased value with loss aversion. However, KKT observed that not all objects demonstrate the endowment effect. Specifically, those objects with perfect substitutes such as coins or other units of money.

Another concept related to attachment value is what has been referred to as "existence values." Krutilla writes: "When the existence of a grand scenic wonder or a unique and fragile ecosystem is

involved, its preservation and continued availability are a significant part of the real income of many individuals . . . to whom the loss of species or the disfigurement of a scenic area cause acute distress and a sense of genuine relative impoverishment (p. 779).

Endowment effects and existence values are consistent with what we call attachment values. Socio-emotional goods may become embedded in an object through ownership. Indeed, when one owns an object, one's self-awareness and self-regard is more likely to be associated with it. In contrast, socio-emotional goods may become embedded in an object without the ownership of the object being transferred. For example, an exchange of socio-emotional goods may be associated with a positive experience with a friend at the Grand Canyon resulting in attachment value for the natural wonder.

While much work remains to be done to identify how attachment values are created, we identify two possibilities. The first possibility for the creation of attachment values is through an object's association with an individual with high levels of social capital. A respected family member may give a personalized object to another family member and the object acquires attachment value because of the social capital between the giver and receiver of the object. Flowers to a friend, a letter to an admirer, or recognition from an expert fall into this category. A second possibility for the creation of attachment value is social approval. Suppose one earns an educational degree, is elected to an office, or acquires property. Societal approval for educational achievement, earning a public office, and holding property embeds socio-emotional goods in and creates attachment values for educational degrees, public offices, and for one's property.

Finally, since attachment values depend on the creation of socio-emotional goods and social capital, changes in social capital can change attachment values. Divorces often lead to the sale of objects once owned jointly at "fire" sale prices because these have lost attachment value. The attachment value of memorabilia associated with sports teams and famous persons often changes with the win/loss records of the teams and the successes or failures of the famous persons. In contrast to endowment effects and existence values, attachment values can change over time depending on the socio emotional goods fueling the attachment value.

Goods with high attachment values (HAVs) are more difficult to trade than goods whose values are connected to their physical properties. The reason for this difficulty is that owners of HAV goods usually experience difficulty finding willing buyers who also value the object for the socio-emotional goods embedded in it. There are some objects, such as works of art or historical items of interest, that do have generally accepted high attachment value because there exist large numbers of willing buyers. However, the more usual case is for only a small group to share the same attachment value for a good, and thus the opportunities for exchange are limited. Another difficulty of trading HAV goods for their value in physical units is that there are sometimes social capital costs incurred in the transaction. Mary Todd Lincoln, wife of Abraham Lincoln, was generally excoriated when she sold her personal effects to raise money to pay her debts (Baker). "Goods with such high attachment value should not be traded for money." Much more common, is the exchange of HAV goods as gifts or inheritances between persons with bonding social capital.

Sometimes we buy goods with little physical value but willingly pay high prices that exceed their physical utility to embed them with socio-emotional goods. For example, one may purchase an inexpensive gift that fails to gain an association with socio-emotional goods because it represents

an insignificant sacrifice. On the other hand, a similar gift with little physical utility but which costs a significant amount of money may acquire attachment value because its acquisition required a large sacrifice. Robert Frank describes other examples of efforts to embed objects with socio-emotional goods by making expensive purchases.

Recognizing the importance of socio-emotional goods and attachment values, marketers of products routinely hire famous persons to associate with their products, increasing the likelihood that their significant social capital will create attachment values for their products. Having a person with pervasive social capital is essential for embedding the object with socio-emotional goods. Otherwise, the potential buyers who accept the product's attachment value will be few. So, we are more likely to purchase a product associated with a famous person than the identical object that lacks the association (Tye).

Some implications of attachment values follow:

- ! When an object's value is mostly attributed to its attachment value, only those persons who value the socio-emotional goods embedded in the object are potential buyers.
- ! When the owner of an object attaches to it significant amounts of socio-emotional goods which are not likely to be shared by potential buyers, the object will rarely enter a market for sale. Thus, personalized memorabilia rarely trade except at the demise of its owner.
- ! Those who desire to purchase an object, which for them has attachment value, will be willing to pay more for the object than its physical value. (Collectors have paid millions of dollars for baseballs with attachment values when baseballs with similar physical properties could be purchased for a few dollars.)
- ! Non-physical objects may acquire attachment values. For example, laws and customs that are willingly obeyed often have attachment value. Otherwise, other forms of motivation would be required for them to be obeyed. For example, some states have enacted laws that require bikers to wear helmets. Because for some, this requirement has negative attachment values, the law is frequently disobeyed and enforcement is difficult.
- ! When objects are associated with someone we dislike or with a cause of which we disapprove, negative attachment values are created. Examples of objects with negative attachment values for some are the century old statues of Buddha destroyed by the Afghanistan Taliban. Frequently, the personal property of persons or groups who are disliked acquires negative attachment values. Examples include the personal property of divorced couples, symbols of the Nazi party, and advertisements of personal injury lawyers.

Table 2 summarizes the relationships between social capital, socio-emotional goods, and attachment values. The rows and columns of Tables 1 and 2 are identical. The difference is that the cells in Table 2 reflect outcomes while the cells in Table 1 describe kinds of social capital.

Networks. Social capital exists in relationships (bonding, linking, and bridging). Networks can be used to describe the patterns of relationships or where one's social capital resides. Of course, the strength of relationships varies and not all networks are connected by social capital. For example, one's network may include all persons employed in one's place of employment. However, in this network, it is likely the case that not all persons in the network may be connected by their social capital.

Table 2. A description of outcomes resulting from exchanges of physical and socio-emotional goods between social capital connected persons A and B.

	Person A provides person B mostly socio-emotional goods	Person A provides person B mostly physical goods and services
Person B provides person A mostly socio-emotional goods	Persons A and B increase their utility and consumption of socio-emotional goods. A and B's social capital increases. Objects associated with the exchange of socio-emotional goods acquire attachment values for persons A and B.	Person A consumes socio-emotional goods. Person B's economic well-being increases. A's social capital that resides with B increases. The physical object exchanges may acquire attachment value for person B.
Person B provides person A mostly physical goods and services	Person B consumes socio-emotional goods. Person A's economic well-being increases. B's social capital that resides with A increases. The physical object exchanges may acquire attachment value for person A.	Economic well-being increases for persons A and B. Social capital may be increased for persons A and B.

We believe that what others have asserted is true, that we often build social capital and create social capital-connected networks on our way to other places to perform other tasks. For example, members of a team may create social capital as they cooperate for a common goal. Or, they may discover shared kernels they did not know existed and convert latent social capital into actual social capital. Thus, non-social capital-connected networks may be converted into social capital-connected networks.

Networks can have a variety of structures including hierarchal, linear, and diffuse. An organization may have a formal network structure, but social capital may lead to defacto social capital-connected networks. For example, a supervisor may believe that she is in the center of the network of employees when in fact the workers have a social capital-connected network that excludes the supervisor. As social capital connections in a network increase, one's access to resources and information also increases. However, as one's connections in a social capital network increase, so do the costs of maintaining these contacts, especially measured in time spent. Fortunately, rapid and inexpensive communication devices, such as e-mail and cell phones, have significantly reduced the financial cost of keeping in touch.

An important characteristic of networks is their permeability. Networks based on inherited kernels are less permeable than those based on earned kernels. In some cases, impermeable networks have been observed and criticized as impediments to economic progress (Olson). In other cases, the decline of permeable networks has been observed and cited as the cause of a declining civic traditions (Putnam).

Most social capital-connected networks are maintained through personal contact and experimental learning. Sometimes impersonal social capital networks may be maintained by shared attachment values. For example, some persons belong to international organizations, such as churches, service clubs, political organizations, and business associations, and feel connected, even though they are

not personally acquainted. Their shared kernels and attachment values provide them latent social capital that only requires personal contact to activate. This latent social capital is made possible because they know they share attachment values to certain creeds, concepts, and objects.

Networks resolve the conflict between those who believe social capital is a micro-concept and those who believe it is a macro-concept. In one sense, social capital is a micro-concept because it is supplied by individuals. On the other hand, it is a macro-concept because it resides in networks that may be overlapping and serve to connect segments of society. It is also macro in the sense that the affinity is culturally learned (inherited) and not the result of an individual's conscious effort. Finally, a network may have both micro and macro influences. A network may discourage opportunistic behavior of one member of the network because the cost of doing would be the condemnation of all other members of the network. Thus, networks can perform an important function in maintaining accepted rules and norms.

Each network structure has implications for economic efficiency and the formation of social capital (Burt). Some implications of networks in the social capital paradigm follow:

- ! Those in social capital-rich networks are more likely to act in each other's interests than in the interests of those outside of their network. As a result, networks can have a significant influence on individual behavior of persons in the network.
- ! As social capital increases within a network, productivity will increase and differences in income will decrease among network members, although differences in productivity and income between network members and nonmembers may increase. Thus, one of the causes of poverty must be linked to exclusion of the poor from productive networks.
- ! Networks can be differentiated by their permeability. Networks based on inherited kernels are less permeable than those based on earned kernels.
- ! Networks in which membership requires inherited traits or kernels may impede development and poverty reduction.
- ! Networks in which membership requires earned traits will facilitate development because networks can adapt to changing populations and opportunities.
- ! Asymmetries in relationships embedded in networks create obstacles to flows of resources. For example, if social capital exists between persons A and B and between persons A and C but hostile relationships exist between B and C, then the network is unstable and resource flows are restricted.

Institutions. Institutions are the rules that make possible ordered and meaningful exchanges. They also establish property rights, membership requirements, rules for resolving disputes, and procedures for establishing new institutions. Institutions are the products of the collective response of persons in networks to the actions of others. Institutions often grow out of norms that establish responsibilities. Institutions also reflect the distributions of social capital and in turn influence how social capital is developed in the future. Without institutions, chaos reigns.

Institutions may be formal or informal (Stiglitz). Informal institutions sustain behaviors which are enforced by potential increases or threatened losses of social capital. Informal institutions are not codified. Mostly, informal institutions exist as generally accepted norms of behavior within a network. Examples of informal institutions are the ways households celebrate birthdays and other

special events, accepted practices for grieving, care of children and the aged, and responsibilities for one another in times of distress.

Informal institutions are best suited for organizing exchanges of socio-emotional goods and the exchange of HAV goods. Economic efficiency measured in physical terms is not always produced when exchanges are organized by informal institutions (e.g., the boss hires his sister's son even though he is not a good worker). On the other hand, economic efficiency may be increased through informal institutions that requires the boss to hire his sister's son because he will be loyal, while some other employees may be opportunistic. However, in well-developed economies, we simply must be able to exchange goods and services with persons who are not members of our bonding networks and when these exchanges with strangers occur, we require formal institutions.

Formal institutions are the generally accepted rules of society that operate even between strangers. Formal institutions are most often written down and communicated in public settings, and accepted or changed by following formal procedures. The maintenance and legitimacy of formal institutions depends in part on their attachment value created in social capital relationships. Otherwise, the cost of maintaining them by means of physical or economic incentives eventually overwhelms their possible benefits. Formal institutions may threaten potential violators with potential gains or losses of economic goods or physical punishment. But these are only effective when the percentage of potential violators is small.

A developed economy must have formal institutions that permit strangers to exchange with each other. Otherwise, opportunity to benefit from the skills and production of others through exchange is limited. Unless the poor accept formal institutions they will be excluded from the advantages of the formal economy. However, if formal institutions are to gain attachment values from the poor, the poor must participate in their creation and maintenance and realize some benefit from their existence. Thus, one of the significant challenges for developing countries and communities is to embed socio-emotional goods in formal institutions. Furthermore, the formal institutions must not conflict with the informal institutions.¹²

One of the main differences between formal and informal institutions is their radius of application. The radius of formal institutions is usually far-reaching compared to the more local radius of most informal institutions. Informal institutions are usually supported by social capital-rich networks. In contrast, formal institutions with more far-reaching radiuses depend more on attachment values. However, formal and informal institutions are closely connected. Formal institutions must be legitimized by informal institutions if they are to be maintained without force or threat; and if informal institutions exist and are in conflict with the formal ones, then punitive measures may be required to maintain them. To illustrate the connection between formal and informal institutions, consider the formal institutions represented by tax codes. Some persons take advantage of high monitoring costs and cheat, failing to pay their fair tax. But, in developed societies with successful tax codes, most pay their taxes because they believe it is the right thing to do, not because they fear they will be found out if they cheat.

Conflict will often accompany the creation of formal institutions because of their need to impose costs as well as to distribute benefits. Indeed, some persons may gain power by promising benefits to certain groups at the public expense. Social capital is essential to limit conflicts associated with

the creation and maintenance of formal institutions. Without a minimum level of social capital, societies are unwilling to work together under the existing institutions, even though one's point of view did not prevail. Indeed, one of the essential measures of a unit of government's social capital is its ability to create and maintain its formal institutions without insurrection or resort to violence. True democracies are *prima facie* evidence of a country's widespread social capital. Coercive governments are testaments to its absence.

Power. Power refers to one person's ability to influence the actions of another (Boulding). Power is exercised through potential rewards or potential sanctions. Some sources of power can be associated with the capital or resources controlled by a person exercising power. For example, the power of dollar votes depends on one's financial capital. Human capital may provide power through one's superior skills or knowledge. On the other hand, one's social capital may be a means of exercising another form of power, what Kenneth Boulding calls "hug" power.

Of course, not all of one's social capital is of equal value. Social capital from persons who lack other kinds of resources may provide socio-emotional goods but not access to other kinds of resources on preferential terms. If one needs a loan on preferential terms, it helps to have a friend at the bank. If one needs legal assistance on preferential terms, it helps to know a lawyer.

Power obtained through sanctions can also be in the form of financial sanctions. Such might be the case of threats to refuse to exchange or do business, to sue in court, or to disrupt a competitor's ability to earn income. Power obtained through the use of one's social capital may be in the form of loss of membership, exclusion, devaluations, and loss of reputation. Finally, there may be extralegal forms of sanctions such as physical violence, disrespecting the property rights of another, or using falsehoods to create sanctions.

The plight of the poor is that they have so little power to alter their conditions. They have few financial resources and their social capital often resides in networks with few persons of power who can assist them. The escape from poverty for most depends on their ability to form social capital with persons much different than themselves, what Granovetter referred to as weak ties.

Socio-emotional goods are often included in exchanges of other goods and services, those with social capital from which socio-emotional goods are produced, tend to prefer exchanges within their own social capital networks, all other things equal. (Indeed, HAV goods are likely to be exchanged only in social capital-rich networks.) Moreover, these exchanges are at different levels and terms than those conducted with those who lack social capital. So, we cannot approach the study of poverty reduction as a study of independent agents who act only in their own interest as the usual neoclassical models often suggest. Instead, we must view both individual economic agents, their social capital networks, as critical units of analysis.

Who Are the Poor and How Are Their Conditions Related to Social Capital?

Who are the poor? The World Bank has performed a valuable service by interviewing the poor and giving them a voice to describe themselves and their conditions. They tell us that their pains resulting from poverty are not just a result of being deprived physical goods and services but also

a result of being deprived regard, respect, and membership. Poverty, it appears, is the deprivation of both physical goods and services and socio-emotional goods.

One characteristic of the poor is their lack of shared kernels with the well-off. Too frequently, the poor and the rich attend separate schools, live in separate locations, take their meals isolated from each other, worship at different times and places, marry within their own class, and obtain their medical services at different places. The poor are reminded by their frequent separation from the rest of society that they are different.

One way to characterize the poor is by using the matrix of activities and networks described in Table 3. Activities described in the rows of the matrix may include consumption acts, market exchanges, religious worship, charitable service, work associated with employment, athletic events, political activities, community celebrations, educational activities, recreation and travel, and miscellaneous. Networks, described in the columns of the matrix, include networks of family and extended family, service and athletic clubs, employee organizations, boards of organizations, political parties, religious units, communities, and other networks including machines.

If the matrix were completed for an individual, the cells would contain the number of that person's waking hours for a period of time devoted to each of the activities that occur within a particular network. The numbers in the table for the last row would represent percentages and would sum to 100 percent. While the poor and the wealthy engage in many of the same activities, the poor seem to conduct their activities in fewer networks and often in networks consisting of other poor persons who lack the resources needed to escape poverty. In Table 3, this concentration of one's social capital and activities would be described by having one's time allocated to fewer cells and networks than the wealthy.

Persons often found in fewer and poorly endowed networks include members of households headed by a single parent (usually a mother) who has never been married, rural households without property, and other minority groups who are not socially integrated because of their unique customs or inherited kernels. Finally, in some cases, members of the majority population may find themselves in fewer networks with restricted resources when they fail to connect to others who share their similar trait.

Our premise is that poverty is in part related to one's lack of social capital in resource-rich networks. This absence of social capital, we hypothesize, limits the poor's access to physical, human, and financial capital. When one lacks social capital in resource-rich networks, not only is one's access to resources limited, but often when one does have access, it is on disadvantageous terms compared to those who enjoy social capital. In the next section, we highlight the connection between social capital and poverty reduction.

Causes of poverty. Much of current economic policy relies on what is called here the traditional model. The traditional model is based on economic principles widely accepted and emphasized as early as 1776 by Adam Smith. In the remainder of this section, we review the traditional model, its promise of prosperity, and the reasons why some believe that it has failed to eliminate the problem of persistent poverty. Then, we enhance the traditional model by considering how its implications are altered when viewed through the lens of the social capital paradigm.

Table 3. Hours of participation of activities in specified networks.

Activities	Bonding Social Capital Network	Bridging and Linking Social Capital Networks						Other Networks; e.g., Markets	Subtotals
	Networks of Family and Extended Family Members	Networks of Service and Athletic Club Members	Employee Organizations	Boards of Organizations	Political Parties	Religious Units	Communities		
Consumption Activities									
Distribution Activities									
Religious Worship									
Charitable Service									
Production Activities									
Political Activities									
Community Celebrations									
Educational Activities									
Recreation and Travel Activities									
Miscellaneous									
Hours of Time Spent in Selected Networks Performing Various Activities	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	Total Hours of Participation in Networks
% Time Spent in Selected Networks Performing Various Activities	% X_1	% X_2	% X_3	% X_4	% X_5	% X_6	% X_7	% X_8	100%

The traditional model and poverty. The traditional model emphasizes that development and prosperity depend on our opportunities to specialize and trade. The recognized father of economic thought, Adam Smith (1776), illustrated this principle with his observations of pin makers. One worker alone, he observed, could scarcely produce one pin in a day. Ten workers, however, who each specialized in one phase of pin making and working together, could produce over 48,000 pins in a day. Now, the principle of increased productivity through specialization is repeated globally.

Specialization increases an individual's productivity by permitting specific skills to improve as they are repeatedly practiced. Thus, when tasks are divided and persons specialize, they not only bring improved skills to each stage of the production, but they often bring resources and information to the process that is essential for efficiency. However, specialization requires institutions to organize the coordination of tasks and the distribution of products. Of course, the creation and maintenance of institutions to organize production requires social capital.

When individuals specialize, they give up producing some goods and services essential for their well-being. To obtain these goods and services that they no longer produce, they trade with each other. So, if persons in an economy specialize, they must also trade and in the process they become dependent on the production of others. Once again, trading activities require institutions supported by social capital. As specialization and trade have become global, the economic well-being of countries has become even more interdependent. Thus, the economic conditions in one country may affect the well-being of those who trade with them. It may also have an insurance effect so that unfavorable economic conditions in one country can be offset by favorable economic conditions in another country.

Some countries that do not trust others or that fail to recognize the advantages of specialization and trade, adopt policies of self-sufficiency. The lessons from the past, however, are that policies of self-sufficiency rarely succeed. History and experience have supported Adam Smith. Specialization and trade are necessary for economic progress.

If trades were restricted to barter, opportunities to trade would be severely limited. Only those who could find someone producing what they wanted and in turn desired what they produced could trade. So, money was invented. Instead of limiting one's opportunities for trade to those who produce a desired item, money makes it possible to trade with nearly all persons who produce something of value. In effect, money allows us to acquire what we desire in two exchanges. We exchange what we produce for money and then exchange money for what we desire that is produced by others. The traditional view emphasizes the importance of markets in which goods can be evaluated in terms of money and where formal institutions permit strangers to trade.

If trades were restricted to money on hand, opportunities to trade would be limited because one's income and expenses are rarely perfectly synchronized. So credit was invented. Instead of limiting one's opportunities to purchase and invest one's money on hand, credit is exchanged for loan funds to purchase goods and services and paid for in the future. The development of an economy and the possibility to personally prosper is linked to the availability of credit.

Finally, the traditional view emphasizes that efficient specialization and welfare improving trades require that participants be motivated by opportunities for personal gain, most often measured in terms of physical goods and services and access to power and position.

The traditional view of development has often led to rather predictable policy prescriptions. One of the most important economic policy focuses derived from the traditional view of development has been to encourage specialization and trade. One way to encourage specialization and trade is to reduce the cost of performing trades. Often this has resulted in limiting regulations that restrict trade and the reduction of tariffs, and import and export taxes.

A second policy focus has been to reward efforts to improve communications between suppliers and demanders. High taxes and generous welfare policies and other restrictions on trade are often opposed because these may distort the signals that occur in markets between suppliers and demanders who motivate trade, specialization, and risk taking.

A third policy focus arising from the traditional model has been to encourage monetary and fiscal measures designed to stabilize currencies. The purpose of this policy focus is to provide a stable medium of exchange and to reduce the risk of investing.

Finally, some policy objectives are directed toward the development of institutions designed to secure property rights and ensure enforcement of agreements between trading partners. Some recent writings in this area argue that the poor may be disadvantaged because their property is not secure. For example, DeSoto argues that many of the poor create housing capital, but without clear title to their property, it cannot be used as collateral to obtain other forms of capital.

The traditional approach has been credited for achieving many successes. And, in most cases, it has proven to be a more successful economic system than alternatives, including state-controlled economies. However, despite its successes, persistent poverty remains, even in developed countries. Critics of the traditional approach cite several reasons for its lack of success in eliminating poverty.

First, gains from specialization and trade benefit those with productive skills and resources that are often inherited rather than earned or determined in a market. When workers lack resources, including credit and skills that are in demand, they are excluded from the benefits of specialization and trade. Of course, the solution for a worker whose skills are not in demand is to retool. But, in many cases, the worker lacks the resources required to become retrained.

Globalization and restructuring of trading patterns within an economy favor those who are mobile and well-trained. The poor, who are often neither mobile nor well-trained, are often left behind as changes in the economy require new skills. Sometimes, opportunities to participate in new production networks are structured to favor certain groups with inherited traits, such as ethnic or religious groups or the young. These discriminations and others often disadvantage the poor. Finally, changing economic opportunities that are created through the globalization of markets and restructuring within economies may provide incentives for some to redistribute their investments in social capital. This redistribution may have further consequences for the poor.

All exchanges take place in an institutional setting. The institutions or rules that describe the conditions for exchange also allocate benefits and costs and are often controlled by an elite few and operated for their benefit and the benefit of their friends. Few are the connections between the poor and the powerful and as a result, the rules rarely work in favor of the poor.

In an interdependent world, one person's acts affect others. If person A uses a parcel of land for a house, it cannot be used for the same purpose by B. The same is true if A uses the air or water for waste disposal. The traditional model presumes ownership of these opportunities and emphasizes subsequent trades. But, the character of development depends on who has what to trade. The poor simply own little that they can trade, i.e., have little that constitutes a cost to others. The best possible trade for the poor still leaves them poor. The allocation of ownership essentially rests on social capital, i.e., on the regard and recognition of one person for another. The rich will not give up any of their privileged claims on opportunities unless they regard the recipients as worthy subjects rather than object to manipulated. If the rich care for the poor, their sense of well-being is actually enhanced by giving some property rights to the poor.

The social capital paradigm and poverty. The theme of this paper is that an important cause of persistent poverty is the poor's lack of social capital in resource-rich networks. In addition, we hypothesize that an informed view of economic development and poverty reduction must account for the influence of social capital on the productivity of other forms of capital and the distribution of benefits. Consider next the contributions of the social capital paradigm to the traditional model and to our understanding of the causes of persistent poverty.

The traditional model suggests that persons specialize and trade based on their opportunities to gain physical and financial rewards. The social capital paradigm adds that terms and levels of trade depend not only on one's desire for physical goods and services and productive assets, but also depend on one's social capital and one's need for socio-emotional goods.

The social capital paradigm recognizes that we value and exchange socio-emotional goods as well as physical goods and services. Indeed, it argues that exchanges almost always include some exchange of socio-emotional goods. Furthermore, since socio-emotional goods are most likely to be exchanged in social capital-rich relationships, terms and levels of trade in physical goods and services will favor and encourage specialization and trade among those with social capital. Thus, the productivity of one's physical and other resources will be influenced by one's social capital. We hypothesize that the poor, who often lack social capital in resource-rich networks, must often trade on disadvantageous terms. Furthermore, they often lack information about opportunities for advancement because they lack bridging connections to social capital-rich networks.

The traditional model predicts that in the absence of transaction costs, production will occur in an optimal manner, given the existing institutions and distribution of resources. In contrast, the social capital paradigm suggests that resource allocations will be influenced by social capital and the production of physical assets may not occur in an optimal manner even for the given distribution of resources and rights. (For example, hiring unqualified relatives may be motivated by the need to preserve one's social capital rather than to achieve economic efficiency.) Further, the social capital paradigm emphasizes that the distribution of resources need not be a given, and changes in the distribution of resources are in large part driven by changes in the distribution of social capital.

The social capital paradigm also connects the distribution of social capital and the distribution of income. The connection is straightforward. The distribution of social capital alters the terms and levels of trade and the terms and levels of trade influence the distribution of income. Therefore, the distribution of social capital must be reflected in the distribution of household income. From this deduction emerges another conclusion, namely, that the distribution of household income can be altered by altering the distribution of social capital. In addition, the connection between distributions of social capital and income also predicts that societies of disconnected persons who lack social capital will be disadvantaged economically because their lack of social capital will discourage trade and specialization.

It is well recognized that the under-investment in high exclusion cost goods such as roads, public health, and safety contributes to the persistence of poverty. The traditional model suggests that persons must be motivated by self-interest to invest in high exclusion cost goods (sometimes called public goods). In contrast, the social capital paradigm expands the definition of outcomes that could be considered to be in one's self-interest. For example, one may find it in his or her interest to invest in public goods if it benefits those who are the objects of his or her social capital. A person may also invest in public goods if one receives socio-emotional goods from the investment. Or, one may invest in public goods if the place that would benefit from his or her support has attachment value.

One means of increasing the willingness of persons to invest in public goods provided in their communities is to increase their attachment to a place or to their community. As community members come to view themselves as connected and linking social capital develops among them, their willingness to invest in goods for the community increases. Furthermore, as their exchange of socio-emotional goods increases, it is likely that these may become embedded in their community and create an attachment value to place. Without feelings of connectedness and social capital, the exchange of socio-emotional goods and physical goods and services is less likely to occur and increases in attachment values to places will likely not occur.

The social capital paradigm also has trading implications. In the traditional model, money and credit permit all trades to be reduced to two steps. One trades goods and services for money and then uses the money obtained in the exchange to obtain other objects. In the social capital paradigm, social capital and socio-emotional goods may play the role of money and credit. On some occasions, among the poor and the wealthy, an exchange is most efficiently conducted using socio-emotional goods and investments in social capital. For example, imagine person A doing B a favor (e.g., car repair) with only the expectation that sometime B will do something for A. Their expectations or trust functions like credit. Or, imagine how much easier it is to obtain assistance from a friend to complete a repair using one's social capital than to work out a financial agreement when there is no established market to value the assistance. In these cases, social capital is like credit and money; it can be used in a multitude of exchanges. Furthermore, because it is durable, it can be stored until such time that it is needed, even though some maintenance is required.

The traditional model equates well-being in terms of access to physical and financial resources and sometimes recognizes the value of these in obtaining high status goods. The social capital paradigm suggests that socio-emotional goods are also important for well-being and these are very difficult to self-produce. So, for most persons, socio-emotional goods can only be obtained through exchanges

in social settings. This recognition adds support to the traditional model's emphasis that we are truly interdependent, that we are "all part of the main."

Finally, the traditional model recognizes that in some cases markets fail to develop and these failures impede economic development. The social capital paradigm suggests that market failures may often be related to an absence of social capital and sometimes are related to hostile relationships that create unfavorable conditions for trade by creating negative attachment values. Indeed, the evidence is that few trades occur between hostile groups.

The social capital paradigm predicts that in the absence of formal institutions and a generally connected society, social capital substitutes for other forms of capital. In such cases, one's social capital not only provides socio-emotional goods, but it is also the resource that facilitates trades and economic survival. Of course, social capital used for mostly economic purposes is not as efficient as money, but it can be used as a partial substitute. The goal is and should be to move from social capital-dependent economies to economies that rely on formal institutions supported with attachment values. Indeed, as the number of persons in trading networks expands beyond the number capable of maintaining personalized social capital (as all formal and developed economies must), they must adopt and support formal institutions.

Even though the social capital of the poor may be concentrated and resides in resource-poor networks, it still represents a significant resource for them that is used extensively. For example, in some communities in Nicaragua, the poor use their social capital to cover the costs of funerals. In other cases, the poor exchange their social capital to cover emergency medical expenses or survival rations during economic crises. In effect, social capital of the poor is the difference between their surviving or not. The poor "pay" in future service and respect.

Because the social capital of the poor is often geographically concentrated, the poor are often reluctant to move even to take advantage of new economic opportunities because it would cost them the advantages of their network. This immobility of the poor may be a significant impediment to their economic development because globalization and other market adjustments often require relocation and participation in new networks, both of which are difficult for the poor.

In summary, the social capital paradigm enhances the traditional model and adds new insights about the causes of poverty. It suggests that an absence of social capital in resource-rich networks may create unfavorable terms and levels of trade for the poor and limit their ability to take advantage of new economic opportunities. Further, in the absence of social capital, the present owners of physical capital and opportunities are unlikely to share them with the poor. Finally, the social capital paradigm also suggests that absent linking social capital, communities are likely to under-invest in publicly provided goods, an outcome whose negative consequences fall disproportionately on the poor. Moreover, the evidence is that the distribution of social capital alters the terms and levels of trade, and these influence the distribution of income whose inequality reflects the uneven distribution of social capital.

What Is the Evidence That Social Capital Can Be Used to Reduce Poverty?

Fortunately, many “best” development practices already effectively use social capital.¹³ Many of these have common elements. These practices expand the networks of the poor, they increase the poor’s access to resources on favorable terms, they increase attachment values to place, they create linking and bridging social capital by connecting people from different backgrounds, they increase investments in public goods, and they alter institutions to benefit of the poor.

This conference will highlight the use of social capital to improve the conditions of the poor. Some examples of how social capital has been used or studies that connect social capital to the conditions of the poor follow.

- ! One of the earliest social capital studies demonstrated that educational achievements were related to the social capital environment of the students (Coleman, 1990).
- ! High trust countries enjoyed significant economic advantages (including economies of scale) compared to low trust societies (Fukuyama).
- ! Communities with high levels of civil society and association prospered relative to communities with low levels of civic engagement (Putnam, Leonardi, and Nanetti).
- ! Household income disparity appears to decrease with increases in variables associated with increasing levels of social capital (Robison and Siles).
- ! Opportunities to purchase high quality of land depend on one’s social capital (Perry and Robison).
- ! National economic growth is positively related to trust (Knack and Keefer).
- ! As trading contacts increase, so does one’s income (Fafchamps and Minten).
- ! Empowering communities to choose and administer their own development projects has led to more successful investment outcomes and increased social capital in the community (Robison, Siles, and Owens).
- ! Too numerous to cite are the examples of destruction and poverty resulting from hostility or negative social capital by disrupting and increasing the cost of trades and reducing the opportunities for specialization. Acts of hostility that increase poverty include: war, crime, corruption, threats, discrimination, acts of terrorism, and destruction of the environment.
- ! Successful maquiladoras in Mexico’s Yucatan depend on social capital (Biles, Robison, and Siles).
- ! Resource-conserving practices in the Alti-Plano were associated with social capital (Swinton).
- ! Maintaining of an irrigation system and sharing of water improved with the development of social capital (Uphoff).
- ! Savings and investment clubs have been successfully organized using social capital (Adams and Fitchett).
- ! Technology adoption depends on social ties (Isham).

What Policy Prescriptions Are Suggested by the Social Capital Paradigm?

In an earlier section, we described the connections between the persistence of poverty and the lack of social capital in resource-rich networks. In this section, we consider poverty reduction prescriptions implied by the connections.

Prescriptions. Having identified the lack of social capital in resource-rich networks as a significant cause of poverty, the prescriptions that follow suggest ways to increase the social capital resources of the poor.

Increasing the social capital of the poor improves not only their access to socio-emotional goods, but also increases their access to other resources as well. Many of the prescriptions that follow not only lead to increased social capital, but may have other benefits as well. These benefits include increases in human capital, strengthened institutions, and enhanced trade and specialization. In some cases, we must simply admit that there are questions to be answered before prescriptions can be suggested. These unanswered questions will be described at the end of this section. We remind the conference, that our prescriptions that follow are intended to be the beginning place rather than the ending place for discussions of poverty reduction prescriptions.

Public education. Whenever possible, interactions between different economic classes of society should be encouraged because these are required to build social capital. One of the most important opportunities for interactions across diverse groups is participation in public education. When students from diverse backgrounds participate in a similar educational experience, earned kernels are created and bridging social capital can be formed. Furthermore, having children participate in similar educational experiences sometimes provides parents opportunities to build and participate in social capital-rich networks. But when educational experiences are divided by class or income (private education for the wealthy versus public education for the poor), existing distributions of social capital based on wealth are reinforced.

Therefore, we suggest that investments in public education be increased and become a priority public good. Education will never become an opportunity for bridging until the public education system is viewed as a viable alternative to private education. When public education attracts students from across economic and social backgrounds, only then will it have the capacity to build bridging social capital. In addition, a viable public education system could be the means for developing bridging social capital among parents by making educational investments contingent on the formation of parental support networks and demonstrations that schools have enrolled students from diverse backgrounds.

Adult education. In some countries, poverty persists among certain groups because they cannot speak the generally accepted language. Persons in a language-confined group most often communicate and associate with persons who share the restricted language kernel. As a result, bridging social capital often fails to develop between them and the rest of society because they lack the important kernel of a shared language. Those who cannot speak the generally accepted language are less likely to feel connected to their institutions or to participate in the formal economy. Employers and government officials may overlook the needs and potential contributions of those who lack language skills because they cannot communicate effectively. As a result, they are often disadvantaged in transactions and excluded from opportunities to specialize and trade. A similar difficulty with the same outcome exists among those who cannot read or lack other essential human capital skills that prevent them from participating fully in the economy.

Therefore, we prescribe adult education offerings designed for those who lack language, literacy, and other skills. In the past, investments in adult education have been viewed strictly as investments in

human capital. While investments in adult education may improve human capital, an additional benefit is increased social capital based on the earned kernel of literacy. Gathering together for learning also creates opportunities for exchanging socio-emotional goods and developing social capital. Thus, adult education is both a human capital and a social capital investment with expected high returns.

The social capital paradigm reminds us that in most personalized exchanges, including the provision of educational services, socio-emotional goods are also exchanged. The value of these socio-emotional goods, included with investments in education, may determine whether the investments are successful or not. A significant body of evidence has emphasized that educational achievements depend on the social capital environment in which the students (and adults) are educated (Coleman, 1988). Consequently, steps should be taken to ensure that the educational services are provided without negative socio-emotional goods attached to them. These steps may require policies designed to emphasize shared kernels such as the desire and capacity to learn and to de-emphasize economic differences between students by such acts as requiring common uniforms to mute the differences in economic background of students. Socio-emotional goods need to be produced by parental support groups who encourage students, who support teachers, and who lobby policy makers to continue their support of education.

In the case of adult education, we prescribe experimentation with a diverse number of adult educational efforts. Cultural differences may require that different methods be used in different circumstances. Clearly, education is best delivered when there are social capital-rich relationships between those involved in the educational experience.

Focus on engagement. Most countries support research facilities that produce useful results. However, many of these important results are never employed by those who could benefit from them because those who need the information are not capable of accessing or applying it. One reason the benefits of research so infrequently find their way to the poor is because of the absence of social capital between those who originate research and the poor who could benefit from their findings. This lack of social capital leaves the research without attachment value and the poor skeptical that the real benefits of applying the research equal the benefits promised.

Another reason needed information never reaches the poor is because there are no well-established programs for engagement that ensure that useful research is understood and applied by those who could most benefit. A delivery system for carrying basic information to the poor about hygiene, personal care, and the dangers of harmful substances in many places is desperately needed. Successful extension or engagement efforts require social capital between those providing and those receiving the information.

Therefore, we prescribe that persons connected to the community be trained and empowered to provide information and training to his or her community. Perhaps the connection between this person and the community could be strengthened by expecting the community to select and support this person. Thus, an important prescription is to strengthen the social capital between those providing the information and training and those receiving the information and training. Engagement between those with the knowledge and training and the poor could be encouraged by requiring that those whose research is supported by public funds, as a requirement for continued

support, demonstrate that their research has been implemented across a broad range of clients that include the poor.

Technology transfers. Related to outreach efforts, are new technologies. New technologies often come without attachment values and replace old technologies that have acquired attachment values. When delivered by persons known to the potential users, attachment values are more likely to be positive than when delivered by strangers, or worse, by persons not respected by members of the community. Positive attachment values associated with new technology can also be increased when adopted by respected persons in the community or when demonstrated by well-known and successful persons.

Therefore, we prescribe that efforts be made to increase the attachment values of new technology. Professional advertisers are skilled in the practice of attaching values to products. Their successes can provide some direction for those desiring to create attachment values for new technologies.

Activate latent social capital in communities. There are many positive poverty reduction efforts that can be undertaken by an organized community that recognizes the collective value of its assets. When communities are connected, these social capital-rich networks can organize markets, improve water and sanitation systems, prevent crime, lobby government for improved services, create saving and investment funds, and increase investments in schools. But too often, the poor are not organized because their social capital is latent as opposed to realized.

Communities that share significant kernels of commonalities that are unrecognized or not made important have latent social capital. For a community to convert its latent social capital to realized social capital, persons in the community must recognize that shared kernels exist and that their shared kernels are more important than their differences.

It is sometimes asked, why are the poor so unorganized and often unwilling to express themselves collectively and to discover their shared kernels?. Why are they so unrepresented compared to their numbers? One reason has to do with the nature of poverty itself. When one's survival is at risk, persons rarely take chances on new technologies, experiment with new practices, invest in relationships that would obligate their limited resources, or express their collective voices. Somehow, the poor have to be convinced that organizing to obtain a voice in forming and implementing institutions will improve their chances of survival instead of threatening it. So, there is a need for participants at this conference to discuss ways to organize the poor for productive purposes and to reduce their risks for taking such actions.

One successful effort to encourage the poor to organize has been practiced in Nicaragua and other places. This effort, to be described in this conference, has been supported by domestic and international donors who offer assistance to communities identified as poor, contingent on them forming a network of most members of the community (Lacayo). Then, this new network is required to identify their development priorities and with assistance from professionals, prepare requests for assistance. If their projects are funded, they are required to bid and supervise the projects. In one community we visited, the network completed its task of building a school and found their network and social capital useful for completing other projects.

Therefore, we prescribe that communities convert their latent social capital to realized social capital by applying for direct support and that this support be conditioned on the formation of local networks with widespread participation. We also prescribe that the community networks be empowered by giving them the responsibility for administering supported projects, selecting contractors, supervising construction, and managing the completed projects. We also prescribe that public funds intended for communities be placed under the direction of local community leadership with the stipulation that they demonstrate community consensus in the use of the funds.

Leadership development. It will be emphasized in this conference that the development of local social capital-rich networks requires local leaders who have social capital with their communities. Therefore, having leaders in communities must often precede the development of latent social capital.

Successful examples of leadership programs exist, such as the ones sponsored by Western Illinois University and Kellogg Leadership programs. One important part of the program is to simply bring potential leaders together with proven leaders to form networks. However, often lacking in many leadership training efforts is a focus on social capital building skills. Successful local leaders have social capital and they use it to better their communities.

Therefore, we prescribe that universities in Latin America cooperate in the creation of leadership programs with interns participating in community social capital building programs. Aid to support these leadership programs needs to be provided by international donors and state and national governments. Part of the leadership program must include opportunities for interns to train with successful government and business leaders. The success of leadership training that includes social capital development might be enhanced if universities offered degrees in social capital or if related degrees were recognized as important and supported. Indeed, these degrees might require internships in poor communities in which the focus was the better utilization of existing social capital networks and the development of new ones.

Intensify the use of existing networks. Poverty reduction is all about gaining access to new resources and more fully employing existing resources. Many of the prescriptions so far have suggested means for building social capital. Sometimes, however, there are opportunities to better use existing social capital resources. Even the poor have rich social capital resources that are often underemployed. Therefore, we should encourage local groups to use any worthwhile opportunity to organize and more fully use existing levels of social capital. In many cases, the way to begin is with existing social capital networks that can then be used for other purposes. For example, some poor networks pool their resources to pay for funerals. Since these persons have learned to trust each other and work cooperatively to bury the dead, couldn't they also use their goodwill to improve the lives of the living?

Many poor communities have rotating savings clubs. These collect savings from club members and then make loans on an agreed upon priority to club members. An important means for enforcing loan repayment is the threatened loss of one's social capital. Those who fail to repay are known to the community and lose their respect, regard, and any chance for preferential treatment by community members. Sometimes these clubs have some public support and the loans are

collectively guaranteed by the community. The important point here is that these same networks could be used for other purposes besides collecting savings and dispersing loans.

Therefore, we suggest that efforts to build social capital at the local level begin with efforts to identify existing community networks and then use these networks for other purposes. Such efforts to assist communities to more fully utilize and expand their social capital could be assisted by community persons trained in leadership skills, persons from international support groups such as the Peace Corps, and others.

Indirect use of social capital. In some cases, we simply must admit that some communities of the poor have few means of acquiring social capital from the wealthy and the powerful within their countries or the agencies from which they need assistance. In these cases, it is important to recognize that social capital is fungible. The fungibility of social capital allows one indirect access to needed social capital resources. For example, one may need the support of a government official but lacks the needed social capital to gain the support. However, the poor may have social capital with international donors or other government agencies that have influence on those who must agree to the support. These relationships with the agency from which support is needed can be used in an indirect way to obtain the needed support. Therefore, we prescribe that poor communities learn to use their social capital indirectly.

Maintain social capital through employment. In some cases, especially in areas of high unemployment, the poor lack basic services as well as food, clothing, shelter, and often medical attention. In these cases, public assistance is essential for their survival. However, when these goods and services are delivered in ways that imply the poor are undeserving or inferior because they cannot provide for themselves, serious discomfort is created because the support is accompanied by negative socio-emotional goods. And, because the physical goods and services are desperately needed, the poor accept assistance even though they lose some sense of dignity in the process.

But the poor and unemployed almost always have some useful skills they could offer to their communities and others in exchange for their public assistance. If the services of the poor could be employed and exchanged for needed public assistance, their receipt of public assistance need not be accompanied with negative socio-emotional goods.

During one period of significant economic depression, the government of the United States organized a number of persons to produce public goods, including roads, bridges, and libraries to write histories and produce paintings. The advantage of these projects was that persons could receive payment while at the same time receiving positive socio-emotional goods by knowing they were providing services in exchange for their support.

Therefore, we prescribe a system of exchange be established in which those with needs for public assistance be provided opportunities to exchange their services to the communities or to others in need, in exchange for goods provided by the community. Communities should be creative in providing opportunities for service ranging from beautification projects to child care services for working mothers, or to support services at local schools. Sometimes those supplying public services in exchange for support could be trained in marketable skills, much like an internship program.

Publicize hostility. Finally, while we have prescribed investments in social capital of the poor as a means of escape from poverty, a careful investigation of the main cause of poverty finds that poverty is not just caused by an absence of social capital, but by the presence of hostility or negative social capital.

Negative social capital (feelings of hostility, rather than sympathy) often create barriers to trade. Indeed, hostility, or negative social capital, is likely the most significant impediment to development and poverty reduction. The consequences of hostility are exclusion, discrimination, civil wars, strikes, institutional instability, and high crime rates. Negative social capital can only be reversed through the exchange of socio-emotional goods that include validation, expressions of goodwill, and transparent information flows. One means for reducing the influence of those with power and hostile feelings is to publicize their actions. The mistreatment of Rosa Parks during the civil rights movements led to sweeping changes in the institutions of the United States. Publicizing the working conditions of workers employed by international companies led to improved working conditions. In effect, publicizing the conditions of the poor mobilizes latent social capital for their relief by creating negative socio-emotional goods for those who may be guilty of their mistreatment.

Therefore, we prescribe that the negative consequences of hostility be publicized and made known to those of goodwill. The consequences of hostility are most egregious when they are practiced by those employed in public service. To eliminate these consequences, those who practice discrimination and mistreatment of the poor should be eliminated from public service. A free press is essential for publicizing acts of hostility.

Build attachment values to place. Embedding socio-emotional goods in objects creates attachment values. One of the problems of developing countries and neighborhoods is that their places of residence often lack attachment value. One consequence of the lack of attachment value is that those most able to contribute to the well-being of their country and community leave and take their potential contributions with them. Those who are immobile remain without commitment to their place of residence. Another consequence of countries and communities that lack attachment value is the degradation of the environment and the squandering of natural capital, often by outside organizations which further reduces attachment values.

Therefore, we prescribe significant efforts be made to create attachment values for communities and countries. This can only be done by providing persons with a sense of ownership and control over the conditions and events that occur in their place of residence. Enforceable property rights leads to investment by individuals, which in turn bolsters economies, and increases attachment values. A sense of influence on local events could be encouraged by open forums, increased voter enrollments, and neighborhood organizations.

Another possibility for creating attachment values is for pageants and local celebrations with widespread participation that celebrate one's place. Another approach for creating attachment values with places is to improve one's place and its services and to establish connections between it and other places. Often this is done through sporting events, but these are competitive and their long-term value is limited.

Places acquire attachment values when favorable experiences occur there. Thus, the establishment of firms that provide satisfactory jobs should be sought out. Communities should establish committees to explore ways to improve the provision of socio-emotional and physical goods and services. Often communities have local attractions or produce unique products that could be emphasized to attract visitors and businesses.

Empower local networks. Distributions of household income, information, and access to social services and property rights, reflect existing distributions of social capital and configuration of networks. Poverty reduction requires that the social capital distributions and network configurations be changed to allow the poor access to resources needed to improve their lives.

The poor need financial, physical, and human resources. But, if the provision of these resources by aid donors reinforces and maintains existing networks that exclude and sometimes disadvantage the poor, then the benefits of the aid have been reduced. The benefits of aid provided the poor can be increased when used to build networks among the aid recipients. The successful members of a community must be convinced that their well-being can be enhanced by expanding at least some of their networks to include the participation of the poor. The political voice of communities depends on their connectedness.

Therefore, the prescription is for communities to create public settings in which community members determine their most pressing needs and then organize to obtain the resources needed to achieve their goals. The quality of community life is linked to interlocking networks that create attachment values for their place and support for its institutions.

Utilize the advantages of family networks. One important network required for the alleviation of poverty is the firm. Many firms in developing countries limit their employment to members of their families and extended families. Family firms have advantages over other firms under several conditions and are likely to organize when transaction costs are high, when quality control of goods and services is difficult, when there are significant complementarities inherent in the firm that would be lost if the transactions were undertaken outside of the firm, when there are substantial socio-emotional goods that would be sacrificed by out-sourcing the work, and when markets do not exist for goods and services required by the firm. Family firms often have significant social capital resources that are essential for a successful firm. Their difficulty is that they sometimes lack human, physical, and financial resources required to successfully organize and manage a firm.

Therefore, we prescribe that the access of family organizations to credit and professional support be increased. The requirements would be that they have a network of participants, that they have a successful plan for their firm, and that they cannot obtain the needed resources elsewhere.

Strengthen the social capital of households. Networks of households headed by an unwed mother, and to a lesser extent households headed by a single parent, generally tend to participate in networks with limited resources. This is because they have so few resources to invest in building their connections to other networks.

Therefore, we prescribe that youth be encouraged in a variety of religious, civic, and household settings to postpone child bearing until after marriage and that marriage be used to build an expanded

network for the new couple. Informal institutions that require costly marriage celebrations and that discourage formal marriages should be altered. Finally, important efforts must be extended to provide training and access to these single-parent households on terms they can access. For example, child support may be provided for single parents to improve their human and social capital.

Strengthen markets to build social capital. An important opportunity for expanding one's network is participation in markets in which one's exchange partners are often strangers. Participation in an exchange in which both partners to the exchange benefit is an important earned kernel that has the potential to create social capital.

Therefore, we suggest that public funds be invested to create and support formal market settings. These may include investments to support the exchange of information, the establishment of grades and standards, and inspection services to promote the safety of consumers. For example, arm's-length inspections of weights and measures used and sanitation methods employed could benefit everyone in the market. Finally, it is prescribed that efforts be made to increase the poor's participation in markets by research about products they could produce that might be in demand. Of course, markets can simply reinforce existing distributions and not benefit the poor unless specific measures are adopted to provide the poor opportunities to participate.

Support formal institutions. Social capital formation occurs mostly from the bottom up, not the top down. Informal institutions are derived from personalized social capital. Informal institutions must support and therefore precede effective formal institutions.

Formal institutions, created and maintained by a powerful minority, provide opportunities for cronyism, nepotism, and corruption. In many cases, outside observers need to be used to ensure that the often unconnected poor develop confidence in their political systems by providing them opportunities to organize for political goals, to monitor outcomes to ensure a fair electoral process, and to be recognized as political equals in access and influence on the political process.

Formal institutions that reflect racism and discrimination based on inherited kernels should be vigorously opposed. Opposition to institutions that often disadvantage the poor requires organized networks among whose members the goal of equality may often provide meaningful kernels.

Informal institutions are often exclusive and discourage widespread specialization and trade. Formal institutions are required by advanced economies because they permit strangers to trade. If poverty is to be reduced, formal institutions must be supported.

Power resides in networks and in their influence on formal and informal institutions. Only when the voices of the poor are connected in networks will they have influence on the formal institutions that distribute costs and benefits. In the absence of an organized voice for the poor, those with power and an interest in the well-being of the poor must examine existing formal and informal institutions for their influence on the poor.

Therefore, we recommend that poverty reduction strategies must be focused on building social capital in households, then in communities, and then larger networks. This does not mean that

macro policies of poverty alleviation should be ignored. But, it does mean that to be effective, they must be accepted and supported at the local level and households.

Unless the poor accept formal institutions they will be excluded from the formal economy. They will only accept the formal institutions if they have a voice in their creation and in order for them to have a voice, those in power must cooperate.

Evaluate projects based on their social capital implications. Most of the policy prescriptions suggested thus far apply to practitioners. However, important persons involved in the alleviation of poverty are those who evaluate and fund projects. We believe that many funds intended for the reduction of poverty have been misdirected in the past and have produced few tangible results because they failed to consider the effect of projects on social capital.

Based on the social capital paradigm, the following considerations should be made when evaluating projects designed to produce development and to reduce poverty:

- ! How will the prescription reinforce or weaken the social capital residing in networks of the poor and how will it increase their links to other networks to which they are excluded?
- ! What are the likely flows of socio-emotional goods produced by the prescription and hence where are social capital investments and disinvestments that are likely to be produced by the prescription?
- ! What institutions (formal or informal) are required for the successful implementation of the proposed prescription?
- ! How will attachment values for new or existing institutions be changed by the prescription?
- ! How will terms and levels of trade that determine the distribution of income and that depend on one's social capital be altered by the prescription?
- ! How can the power of the poor be increased to reduce this poverty?

Unanswered questions. Social capital is a resource whose distribution is reflected in the distribution of income and access to other forms of capital. This paper's theme is that the conditions of poverty are in part determined by the poor's lack of social capital, especially linking and bridging social capital. One question that needs to be examined is: do the poor also lack bonding social capital? And, to what extent does one's skill in managing and creating bonding social capital determine one's ability to create and maintain other forms of social capital? Finally, we should compare the backgrounds of those with good social capital building skills and those without, and if possible, learn under what conditions are social capital building skills most likely to develop.

A general prescription is to encourage practices and resource allocations that improve the social capital that the poor receive from each other in their bonding and linking networks. There are notable examples of success in building social capital among the poor. Another general prescription is to increase the social capital the poor have invested with the wealthy and well-established. This prescription, however, supposes we know how to increase the social capital or sympathy the rich have for the poor. Stated more precisely, the question that needs to be answered is: how do we increase the bridging social capital of the poor? Fewer policies are directed toward this aim and there are even fewer success stories, except in international relationships.

Summary and Conclusions

Social capital and other forms of capital have interdependent effects. In some cases, social capital may be considered to be an independent variable affecting terms (prices) and levels of trade. In addition, sometimes social capital may be treated as an independent variable affecting property rights and distributions (who has what to trade). However, in still other cases, social capital is a dependent variable that is a function of investments and the results of past trade and other transactions containing socio-emotional goods. Social capital is also dependent on existing distributions of physical resources and institutions that distribute rights and benefits. Thus, it is both determining and being determined. Social capital defined as sympathy is the motor (motive) for favorable treatment with respect to goods and services and for the provision of socio-emotional goods valued in themselves. Terms and levels of trade often favor those in resource-rich social capital networks. Therefore, the distribution of income and wealth and other forms of capital will reflect the distribution of one's social capital. In addition, institutions that establish property rights, impose costs, and allocate benefits are also reflective of the existing distribution of social capital. Those who have social capital in resource-rich networks have an important resource.

Because social capital and the production of socio-emotional goods alter the terms and levels of trade, we cannot be guaranteed that existing production practices and existing distributions of social capital and other resources will reduce poverty by "trickling down" benefits to those who lack resources and whose social capital is in resource-poor networks. We must abandon the incomplete paradigm of development that declares that the problems of the poor will eventually be solved if the rest of the economy becomes wealthy enough. Development and equity should be viewed as compatible and complementary goals.

Poverty is a social capital issue as well as a physical and human capital issue. This conference is about how to increase and utilize social capital to reduce poverty. In our concurrent sessions, we ask: how can social capital be used to reduce the poverty of those living in rural areas, in urban areas, to reduce gender-specific poverty, and how natural resources can be managed to reduce poverty? We will also explore how intermediary organizations, markets, and formal and informal institutions can be used to reduce poverty. We also want to hear how civil society can contribute to poverty reduction as well as service networks and government organizations.

So, the question that emerges is: how do we increase the social capital and network connections of the poor? The challenges are two-fold. First, how do the poor increase their linking social capital in their own neighborhoods and communities? And second, how do the poor increase their bridging social capital that connects them to resources beyond those that are available locally? We expect that of the two challenges, the second will be the most difficult. Indeed, in some cases, expanded linking networks may need to acquire the political and social leverage that allows them to make progress without the benefit of bridging social capital.

One way for the poor to acquire social capital is by giving them a voice that counts. They must gain access to the media to communicate their conditions and to register their needs. There is a latent potential for social capital and goodwill that often only needs to be activated.

Those interested in the well-being of the poor need to recognize that when resources destined for the poor are channeled through established networks in which the poor are excluded, the needed

resources are sometimes diverted and often have the consequence of strengthening existing distributions of power and social capital. In this conference, we will learn about programs designed to see that resources flow directly to those most needy.

Although we have stressed the need for the poor to acquire social capital, this, like other investment skills, requires training. How will they learn how to invest in social capital unless those skilled in building social capital teach them? Thus, outside intervention in programs like the extension programs employed elsewhere are desperately needed. Or, perhaps local NGOs or others can assist. We would hope that one of the outcomes of this conference would be policy recommendations to provide leadership training and instructions on how to build social capital.

It would be naive to believe that the problems of persistent poverty will be eliminated through increasing their social capital stock. While social capital is an important source of socio-emotional goods, it is only one of several forms of capital essential for escape from poverty. The message of this conference is not to substitute social capital for financial and physical capital, but to integrate them.

One of the consistent findings in nearly all development efforts is the value of a strong public educational program. Such programs not only build human capital, but may also be essential for building bridging social capital. The challenge is how to encourage a population in which costs of such a program are concentrated and the benefits diffuse to support such an effort. The alternative has often been the support of well-endowed private schools and poorly supported public ones that reinforce existing social capital distributions. Hopefully, one of the policy prescriptions of this conference will be the need to make public education a priority.

We have suggested several prescriptions to improve the social capital of the poor and to increase their access to other capital resources. These were not described in detail and need the attention of this conference to complete the list and to fill in the details. As we stated in the beginning, we intend this paper to be the starting place and not the ending place for discussions to take place in this conference.

Finally, we believe that the conditions of the poor can be improved by improving their social capital and including them in resource-rich networks. We believe that significant progress can be made to reduce poverty by recognizing the role of social capital in creating conditions of poverty and by employing social capital in meaningful ways to reduce poverty and create development.

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Endnotes

1. See Narayan, et al., p. 137.
2. See www.solarviews.com/eng/uranus.
3. Sally's (2000, 2001, 2002) encyclopedic review and applications of sympathy provide the basis of much of what follows and many of the references to sympathy appear in his works.
4. Social capital is partly fungible because providing socio-emotional goods generally requires personalized social capital. A friend of a friend may provide us access to physical goods and services on preferential terms to please our common friend. However, this same friend of a friend is likely unable to provide us socio-emotional goods because these require a personalized relationship that does not exist. Similarly, human capital is only partly fungible because we do not permit slavery or involuntary servitude.
5. Not all kernels are of equal importance. The importance of kernels in determining social capital depends on several factors. The number of persons sharing the kernel influences the kernel's potential to create social capital. If too many persons have the same kernel, it may be less important because it does not distinguish an identifiable group. A kernel becomes important if the persons sharing the kernel exchange important socio-emotional and physical goods. The importance of kernels depends on the number of persons who support or disapprove of the shared kernel. For example, winning the Nobel price in physics is genuinely admired in the world and makes this kernel very important—partly because so many people approve of those who have this kernel. The importance of kernels depends on their longevity. Sufferers of polio manifest the effects throughout their lives. This is an important kernel partly because its effects last forever. A common cold is over within a few days and is not an important kernel. The cost of sharing socio-emotional goods with persons who share a kernel influences its importance in building social capital. Thus, as neighbors and friends move to different locations, the importance of their shared kernels often decreases. Pressure for cooperative action makes some kernels important. A winning athletic team must develop a sense of goodwill; otherwise, they do not use each other's skills for the best team outcome possible. Thus, team membership is an important kernel.
6. Our definitions of bonding, linking, and bridging should not be confused with Putnam's, who distinguishes between bridging social capital, builds links between groups and bonding social capital, links within groups.
7. Becker (1981) has written on this point in his *Treatise on the Family* in which he describes the relationship between the spoiled kid and the parents.
8. We first noticed the power of hostility in a survey designed to measure discounts and premiums in the sale of used cars (Robison and Schmid). We have since confirmed it in a number of other surveys. For example, in a study of minimum-sell prices for land, hostility added a premium of over 18% to the price that in effect precluded land exchanges between those with hostile relationships (Robison, Myers, and Siles).

9. This paragraph benefits from the excellent summary provided by Whetten and Cameron on the subject of self-awareness (pp. 56-58).
10. We, of course, recognize conspicuous consumption may be motivated by other desires, such as to demonstrate one's connectedness to particular causes, parties, or individuals. Wearing the sports jacket of a particular athletic team is an example of conspicuous consumption that is designed to demonstrate support for an association with a particular group.
11. The term "attachment value" was suggested by Janet Bokemeier in a meeting of the *Social Capital Initiative* (the date of the meeting is not available) to distinguish between feelings of sympathy directed toward objects from those directed toward persons.
12. Less than desirable outcomes result when formal institutions are used to prescribe the exchange of socio-emotional goods. Such was the result in Antioch's efforts to codify dating practices (Leo).
13. See Smith (2001).