

# The Puzzle of Social Capital

## A Critical Review

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This expository note provides a critical review of the burgeoning literature on social capital and highlights a number of conceptual and empirical issues. First, the concept of social capital remains largely elusive, with many different ideas attached to it. This elusiveness has serious ramifications for empirical and policy analysis. Second, while the concept of social capital is used to highlight the positive, productive aspects of sociability, it fails in important ways to qualify as a form of capital. Third, there are both theoretical and empirical presumptions that social capital can lead to undesirable socioeconomic outcomes. Finally, a large body of empirical work on social capital remains mired in measurement and estimation problems.

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*Here I learn to do a service to another, without bearing him any real kindness; because I foresee, that he will return my service, in expectation of another of the same kind, and in order to maintain the same correspondence of good offices with me or others. And accordingly, after I have served him and he is in possession of the advantage arising from my action, he is induced to perform his part, as foreseeing the consequences of his refusal.*

David Hume  
Treatise of Human Nature (1740/1978, 521)

### I. INTRODUCTION

Social interactions matter. They create social networks, foster trust and values, sustain norms and culture, and create community. These social entities—be it in the form of social network or community or norms and culture or trust and val-

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ues—have an important influence on economic as well as social outcomes. While this idea has antecedents in the writings of such diversity of earlier authors as Karl Marx, David Hume, Adam Smith, Antonio Genovesi, Emile Durkheim, and Thorstein Veblen, they have occupied pride of place in the recent literature on social capital. The concept of social capital has been applied to explain a wide variety of social and economic phenomena, ranging from the growth tragedy in Africa (East-erly and Levine 1997) to the mortality crisis in Russia (Kennedy et al. 1998); from the successful group lending programs in Peru (Karlan 2003) to the flourishing township village enterprises in People’s Republic of China (PRC) (Weitzman and Xu 1994). This concept, which highlights the importance of nonmarket social interactions in socioeconomic outcomes, seeks to fill a lacuna in the traditional neoclassical economic framework. It has been argued by sociologist Granovetter (1985) that the neoclassical framework posits an “undersocialized conception of man” that views man as atomized, anonymous, and bereft of any social influence through social relations. In other words, the neoclassical framework ignores the role of nonmarket social interactions in determining individual and collective behavior and shaping economic and social outcomes. In the real world, individual and collective behavior is continuously shaped by nonmarket social influences in the form of culture, norms, and social structure. An individual’s taste for books, restaurants, and movies is often largely determined by what is considered “hip.” Similarly, one’s educational aspirations, decision to smoke or take drugs, and bear children out of wedlock: all these decisions are significantly affected by the behavior of one’s peer groups, role models, and norms and values of the surrounding society.

While there has been a proliferation of the literature on social capital in recent years, it is fraught with serious conceptual and empirical measurement and estimation problems. This paper highlights some of these conceptual and empirical measurement and estimation problems that seem to have arrested the pace of progress of this literature. This paper divides these issues into four broad categories. First, the concept of social capital remains largely elusive. Different authors have attributed different meanings, leading to serious conceptual ambiguities. Second, in parallel with human and physical capital, this literature uses the metaphor of social capital to highlight the positive, productive aspects of sociability. However, in some important ways, social capital falls short of being a form of capital. Third, the existing literature emphasizes largely the positive consequences, eschewing the bad ones. There are both theoretical and empirical presumptions that nonmarket social interactions can lead to undesirable social and economic outcomes. Fourth, a significant body of empirical works in this area remains mired in serious measurement and estimation problems.

The organization of this paper is as follows. Section II deals with the definitional aspects and the confusions surrounding them. Section III addresses the question: Is social capital really a form of capital? Section IV discusses the nega-

tive aspects of social capital that have been largely ignored in the existing literature. Section V points to some measurement and estimation problems that tend to threaten advances in the literature. The final section offers some concluding remarks.

## II. DEFINITIONS OF SOCIAL CAPITAL: A CONFUSING MEDLEY

Different writers have defined social capital in different ways. Sociologist Bourdieu, who has provided an early exposition of the concept, views social capital as “the aggregate of actual and potential resources which are linked to the possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition—or in other words, to membership in a group” (Bourdieu 1986, 248). This definition highlights the network<sup>1</sup> aspect of social capital, i.e., the opportunities and advantages that accrue to individuals from group membership. Bourdieu’s concept of social capital is essentially individualistic. In his writings, Bourdieu focuses on the instrumental value of social capital in deriving economic and social benefits from group membership and the impetus for individual investment in such membership.

An early reference to the concept of social capital in the economics literature is to be found in the work of economist Glen Loury, who has provided an incisive criticism of the neoclassical theories of racial income disparity. Loury (1977, 176) argues:

The merit notion that, in a free society, each individual will rise to the level justified by his or her competence conflicts with the observation that no one travels that road entirely alone. The social context within which individual maturation occurs strongly conditions what otherwise equally competent individuals can achieve. This implies that absolute equality of opportunity ... is an ideal that cannot be achieved.

Loury’s main contention is that the traditional view on intergenerational income mobility is inadequate: it is based on a framework that is excessively

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<sup>1</sup>Network describes links among individuals in a group. A closed group with finite members is often known as club. The term network has been used to describe both the entire set of links among individuals in a group and the set of links around a specific individual. Other related terms include “network closure” and “networks with structural holes.” Network closure, which implies a dense network, means that everyone is connected with everyone in the group. Such a dense network is more effective in enforcing group cooperation (Coleman 1990). Structural hole refers to connectivity between networks. An individual who connects two otherwise disconnected networks spans a structural hole. Those who can play such a bridging role earn rents from such a position (Burt 1992).

individualistic and devoid of social dimensions. A full understanding of the issues of intergenerational income mobility among ethnic groups, Lounry argues, needs to be based on a framework that incorporates such social dimensions as social networks that influence one's access to opportunities. Individuals belong to different ethnic and social groups with different social networks, having different degrees of access to opportunities. This in turn can lead to persistent income disparities across ethnic groups. In other words, the orthodox economic theories that focus merely on creating a competitive market for individual human capital without consideration of social networks would be inadequate to address the issues of persistent racial income disparities. In a recent paper, he further notes:

Individuals are embedded in complex networks of affiliations: they are members of nuclear and extended families, they belong to religious and linguistic groupings, they have ethnic and racial identities and they are attached to particular localities. Each individual is socially situated, and one's location within the network of social affiliations substantially affects one's access to various resources. Opportunity travels along these social networks (Lounry 2000, 233).

In short, Lounry's view of social capital parallels that of Bourdieu in its micro perspective: both emphasize the importance of social network as an individual asset that affects one's economic locus in society.

A similar micro perspective is evident in the recent work of Glaeser, Laibson, and Sacerdote (2002, F439) who define social capital as: "a person's social characteristics—including social skills, charisma and the size of the Rolodex—which enables him to reap market and non-market returns from interactions with others." They further add, "Individual social capital includes both intrinsic abilities (e.g., being extroverted and charismatic) and the results of social capital investments (e.g., a large Rolodex)." This definition highlights a number of characteristics of social capital: (i) it is an individual asset; (ii) some aspects of this asset are intrinsic to an individual and some can be augmented by individual action; and (iii) it can be purposefully used to augment one's market and nonmarket position.<sup>2</sup>

The author who has done the most to popularize the concept, particularly in sociology, is Coleman. Coleman's characterization of social capital is however astoundingly vague. While subscribing to an individual perspective that "social

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<sup>2</sup>All social relationships are not instrumental and pursued to enhance one's market and nonmarket positions. Social relations can be noninstrumental and desired for their own intrinsic values. Social relations based on utilitarian calculations can be exceedingly undependable, as Aristotle has noted long ago in his *Nicomachean Ethics* that utilitarian friendship is a very unreliable type of friendship (van Stavern 2000).

capital constitutes a particular kind of resources available to an actor”, Coleman (1988) goes on to state:

Social capital is defined by its function. It is not a single entity but a variety of different entities, with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors—whether persons or corporate actors—within the structure (Coleman 1988, S98).

Coleman’s work has opened up the way for a whole plethora of new definitions that often emphasize different and contradictory aspects of social capital. Indeed, Coleman himself has been a leading contributor to this potpourri of confusion. While his examples of social interactions in maintaining trusting relationships—like those among the Jewish diamond merchants in New York (Coleman 1988)—are interesting, Coleman includes under the rubric of social capital many disparate ideas. As Portes (1998) has correctly noted, Coleman includes under social capital both the causes and consequences of social capital. That is, both the mechanism that generates social capital—such as the reciprocity of expectations and group enforcement of norms—and the benefits accruing from the possession of social capital—such as access to group resources. Coleman also included in his definition of social capital the “appropriable” social organizations,<sup>3</sup> which provide the context for sources and effects of social capital to materialize.

The above individualistic perspective of social capital differs from the aggregate/community perspective that seems to have emerged as the dominant paradigm in the literature, particularly in the hands of political scientist Putnam. Putnam, however, offers an even more expansive definition of social capital than Coleman. According to Putnam (1995, 67), “social capital refers to features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit.” In his recent work, he provides further elaboration on the definition:

Social capital is closely related to what some have called “civic virtue.” The difference is that “social capital” calls attention to the fact that civic virtue is most powerful when embedded in a network of reciprocal social relations. A society of many virtuous but isolated individuals is not necessarily rich in social capital (Putnam 2000, 19).

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<sup>3</sup>Appropriable social organizations, according to Coleman, refer to voluntary associations that are used for purposes other than their original intent. An example of an appropriable social organization is the residents’ association in an urban housing project that is initially formed for the purpose of pressurizing builders to fix such residential problems as leaks, crumbling sidewalks, etc. After the problems have been solved, the organization becomes available for appropriation by the residents to improve their quality of life.

According to this aggregate perspective, social capital—or its absence—is a property of a group or a community or even a nation as a whole, although there is less than unanimity among authors what this property is. Different authors have highlighted different aspects.

Some recent notable contributors to this aggregative perspective include Inglehart, Fukuyama, Bowles, Gintis, and Hayami. Inglehart (1997, 188) equates social capital with “a culture of trust and tolerance, in which extensive network of voluntary associations form.” And to him, culture is “a system of attitudes, values, and knowledge, that is widely shared within a society and is transmitted from generation to generation” (Inglehart 1997, 15). His research interest is however to link this cultural dimension to economic and political outcomes at the country level—in particular the level of democracy.

Fukuyama (1995) equates social capital with “trusts”<sup>4</sup> and highlights its role in reducing transactions costs and increasing economic efficiency.<sup>5</sup> These transactions costs are salient in day-to-day economic activities like finding the appropriate buyers and sellers, negotiating contracts, complying with government regulations, and enforcing contracts in the event of dispute or fraud. According to Fukuyama (1999, 16), social capital is:

an instantiated set of informal values or norms shared among members of a group that permit them to cooperate with one another. If members of the group come to expect that others will behave reliably and honestly, then they will come to trust one another. Trust acts like a lubricant that makes any group or organization run more effectively.

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<sup>4</sup>The social capital literature often makes a distinction between personalized trust and generalized trust. The former, which exists between individuals of the same group, results from repeated interpersonal interactions. The latter, which exists between individuals of different social groups or kinship networks, results from the knowledge of the population characteristics, the underlying culture, and the incentives they face. While personalized trust takes time to develop, generalized trust is instantaneous.

<sup>5</sup>Without using the term social capital, economists have long recognized the role of “trusts” in coping with market failures and establishing economic efficiency. A clear, explicit statement is to be found in Arrow (1971, 22) who notes: “In the absence of trust, opportunities for mutually beneficial cooperation would have to be foregone.... norms of social behavior, including ethical and moral codes ... (are) reactions of society to compensate for market failures.” Indeed, even much before Arrow—and the advent of the first fundamental theorem of welfare economics—such 18th century philosopher-economists as David Hume, Adam Smith, and Antonio Genovesi wrote about the importance of trust in economic transactions (Bruni and Sugden 2000). Indeed they devoted a good deal of attention to such issues as: how trust can be rational, under what conditions such rational trust is possible, and the role of economic and social institutions to reproduce these conditions.

Echoing a similar theme, Bowles and Gintis (2002, F419) define social capital as: “trust, concern for one’s associates, a willingness to live by the norms of one’s community and to punish those who do not.” This definition highlights the role of trusts and norms to bind the members of the group/community to cooperate. According to Bowles and Gintis, their definition follows a “social structural approach” that contrasts with the “individual-based approach” of Glaeser and others.

Hayami (2001, 291) also emphasizes a social structural perspective:

Relationships of mutual trust created through long-term and multiple transactions... would not only be effective in suppressing moral hazards between the contracting parties but would also promote collaborative relationships within the wider community. ... Thus, trust accumulated through personal interactions in the community increases efficiency and reduces costs associated with the division of labor. In this regard, trust is a kind of “social capital” similar to social overhead capital such as roads and harbors.

To Hayami, social capital is shorthand for “community” that generates a number of positive social externalities. The trust and social harmony that glues a community can help overcome the opportunism and moral hazard in interpersonal relationships. This in turn can help not only to reduce transaction costs in various types of market relationships but also overcome the free-rider problem in the provision of local public goods in a community.

The above sampling of definitions suggests that social capital has been associated with many different notions.<sup>6</sup> For some, social capital is an individual asset that comes from access to networks and social connections, whereas others view it as a shared asset that resides in a homogenous collective entity—such as a community with common interests and shared values. Some authors have focused on trusts and tolerance, while others have focused on the degree of civic and social engagements as the vehicle of such social capital. Still others have highlighted issues of culture and social norms. A strand of the literature applies the theory of repeated games<sup>7</sup> to interpret norms of behavior, culture, and informal institutions: how they emerge and how they get sustained over time.<sup>8</sup>

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<sup>6</sup>In the words of Dasgupta (2000, 325), “social capital (has been) a peg on which to hang all those “informal” engagements we like, care for and approve of.” In addition, the concept is being continuously stressed with reckless abandon. This has led Fischer (2001, 3) to comment that the concept is “expand(ing) in all directions like a swamp in a bad weather.”

<sup>7</sup>Repeated-game models highlight how long-run self-interest can help overcome short-term temptations of opportunism. A well-known result in game theory, known as the folk theorem, states that enlightened self-interest of sufficiently forward-looking players can ensure a full gamut of cooperative possibilities (Gibbons 1992). The basic intuition behind the theorem is

Given that the concept of social capital is a heterogeneous one, embodying a set of distinct but related notions, it throws up a serious measurement and aggregation problem. This is most explicitly stated by Dasgupta (2000, 327): “It encourages us to amalgamate incommensurable objects, namely (in that order) beliefs, behavioral rules, and such forms of capital assets as interpersonal links, without offering a hint as to how they are to be amalgamated.” This led Dasgupta to suggest—quite sensibly—that these different notions of social capital need to be studied separately to understand how they are interrelated.

### III. IS SOCIAL CAPITAL REALLY A FORM OF CAPITAL OR A BAD METAPHOR?

Proponents of the concept of social capital have devoted considerable attention to explaining why it can indeed be considered as *capital*. Its current conceptualization draws on the early work of Pierre Bourdieu, which differentiates between different forms of capital that included economic capital, cultural capital, linguistic capital, scholastic capital, and social capital. Later on, in his work entitled *The Forms of Capital*, Bourdieu (1986) narrows these different types of capital into three—economic, cultural,<sup>9</sup> and social—and addresses the question of how these forms of capital interrelate and can be converted from one form to the other in order to maximize accumulation. From this perspective, he defines social capital as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition ... which provides each of its members with the backing of collectively-owned capital” (Bourdieu 1986, 248). This view of social capital as resources—accumulated primarily as a set of obligations from others according to the norm of reciprocity—which agents can draw on to achieve

that if an individual is to be punished in the future for noncooperative behavior today, this threat is sufficient to sustain cooperation over time. This result has been further generalized by Kandori (1992) who shows that when each member of the group punishes noncooperative behavior even when she is not directly affected, it leads not only to greater cooperation but also to the emergence of a set of strictures, something akin to a social norm. This paper also shows how the idea of social sanctions can be formalized.

<sup>8</sup>The repeated-game approach suggests that one’s understanding of the other’s long-term self-interests may help one to “trust” the other and not succumb to certain short-term temptations. However, there is more to trust than rational calculation (Williamson 1993). To the extent that this calculative trust is important, the theory of repeated games can provide useful insights.

<sup>9</sup>Cultural capital refers to one’s cultural features and social backgrounds (such as language, accent, manners, social conduct etc.) that influence one’s advance in life. Obviously, the concepts of social and cultural capital are closely interrelated.



their interests is however not new.<sup>10</sup> A macro-aggregative perspective of social capital, as may be recalled, is to be found in the recent works of authors such as Putnam who view it as an attribute of social organization. Putnam (2000) also makes a further taxonomic distinction between two types of social capital—bonding and bridging. Bonding social capital that connects people of similar backgrounds fosters denser social networks while bridging social capital that connects people of dissimilar backgrounds creates larger networks. Notwithstanding this taxonomic refinement and the heuristic appeal for the idea of social capital as a form of capital, the argument is yet to win many converts in social sciences, particularly among economists.

At first blush, social capital may seem like a natural complement to the concepts of physical and human capital. However, analytically this extension is far from straightforward—and throws up serious conceptual incongruities. To Solow (2000, 6), “it is an attempt to gain conviction from a bad analogy.” And Arrow (2000) calls for an outright abandonment of the capital metaphor and the term social capital. To him, capital has three important characteristics: (i) capital has a time dimension; (ii) it requires deliberate sacrifice of the present for future benefit; and (iii) it is “alienable”—that is, its ownership can be transferred from one person to another. According to Arrow, social capital may have a time dimension similar to physical capital—for example, reputation or trust takes time to develop and hence it satisfies (i). However, social capital does not necessarily entail any material sacrifice,<sup>11</sup> and hence does not generally satisfy (ii). And finally, in most cases, it is difficult—as with human capital—to change the ownership of social capital,<sup>12</sup> and hence does not satisfy (iii). All this would suggest that conceptually, social capital falls short of being a form of capital.

And of course, this conceptual criticism applies as much to social capital in general as to Putnam’s taxonomic innovation regarding bridging and bonding social capital. In this connection, Fischer (2001, 3) rightly notes that Putnam’s use of such metaphors, as “bridging” and “binding” social capital is somewhat infelicitous as “both terms are more suited to a metaphor around ‘ties’ than around ‘capital.’”

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<sup>10</sup>As Portes (1998) notes, a similar perspective can be found in sociology in the classical analysis of social exchange by Simmel, which has resurfaced more recently in the works of authors of the rational action school such as Coleman and Schiff.

<sup>11</sup>While some aspects of social capital are costly to acquire, others do not entail any material sacrifice. The latter category includes membership of religious and ethnic groups, the nobility one is born into, and individuals’ inherent social skills and charisma.

<sup>12</sup>The problem of alienability in social capital has been expressed most starkly by Fischer (2001, 3) who observes: “It (social capital) is a metaphor that misleads: Where can I borrow some ‘social capital’? What is the going interest rate? Can I move some of my social capital offshore?”

Solow (2000) raises some measurement problems. While physical and human capital can be measured and their rate of returns calculated, such rigorous measurements are much more problematic in the case of social capital.<sup>13</sup> Solow cites the example of the East Asian miracle economies and the total factor productivity estimates of Kim and Lau, and Collin and Bosworth, and notes that these estimates seem to suggest that either there is no special social capital story underlying the Asian success, just conventional production economics, or that social capital is precisely what accounts for the ability of these societies to accumulate capital and to mobilize skilled labor effectively. He concludes that “either way, there is something to look for that is at least capable of being found” (Solow 2000, 9). In light of these conceptual and measurement problems, many economists are reluctant to label social capital as capital.<sup>14</sup>

In other words, although there is a general consensus that social interactions have important influences on economic outcomes, there is not much of a consensus whether these influences can be—or should be—meaningfully codified into such a metaphor as social capital. The situation has been nicely summarized by Bowles and Gintis (2002, F420):<sup>15</sup>

Perhaps social capital, like Voltaire’s God, would have to have been invented if it did not exist. It may even be a good idea. A good *term* it is not. Capital refers to a thing that can be owned—even a social isolate like Robinson Crusoe had an axe and fishing net. By contrast, the attributes said to make up social capital describe relationships among people. As with other trendy expressions, “social capital” has

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<sup>13</sup>As Dasgupta (2000) has noted, there is a serious measurement problem with social capital, even if it is assumed that it is a type of capital. To aggregate the different components of social capital as networks and norms into a stock of capital, one would require a set of market prices associated with different types of social capital. However, these are the commodities where market failures are most conspicuous.

<sup>14</sup>Even many ardent advocates of the concept of social capital concede that social capital is not really a form of capital in the strict sense of the term. For example, Ostrom (2000), who argues that social capital is a fundamental concept and an essential complement to natural, physical, and human capital, notes that social capital is different from other forms of capital in some important ways. She identifies four key differences: First, social capital does not wear out with use—on the contrary, it erodes from a lack of use. Second, it is not easy to see or measure. Third, it is hard to construct through external (for example donor) intervention. Finally, national and regional government institutions strongly affect the level and type of social capital available to individuals to pursue long-term development efforts. Indeed, these key differences constitute the very basis for the Arrow-Solow critique.

<sup>15</sup>Bowles and Gintis advocate abandoning the term social capital in favor of community that “better captures the aspects of good governance that explain social capital’s popularity, as it focuses attention on what groups *do* rather than what people *own*” (Bowles and Gintis 2002, F420). It is noteworthy that a recent volume by Aoki and Hayami (2001) on the subject was named, *Communities and Markets in Economic Development*.

attracted so many disparate uses that we think it better to drop the term in favor of something more precise.

#### IV. TAUTOLOGICAL DEFINITIONS AND EXAGGERATION OF BENEFITS

Much of the existing literature defines social capital in a way that tends to exaggerate its beneficial aspects. As Portes (1998) and Durlauf (1999) have noted, these definitions confuse its sources with consequences and its existence with functions. In other words, the evidence of the existence of social capital is often inferred from its positive outcomes. For example, as noted earlier, Coleman (1988) defined social capital “by its functions” and Putnam (1995) viewed it in terms of “features of social life ... that facilitate cooperation and coordination for mutual benefit.” This line of argumentation leads to circuitous reasoning—and exaggeration of the benefits of social capital. Indeed, social capital has its benefits and costs: it is not an unmixed blessing. It can lead to such adverse effects as exclusions and market distortions, moral hazards, restrictions of individual freedoms, and perpetuation of backward norms. The following further elaborates these points.

First, social capital can open up economic opportunities for the members of the network. However, these networks can at the same time act as a restrictive device and limit entries for those outside the network. Race, ethnicity, religion, language or the simple confluence of economic interests is often the basis of many such real world market and nonmarket exclusions. As cited by Portes (1998), Waldinger (1996) in his study of immigrant labor in New York city notes that entry into jobs in construction and service industries is highly restricted and poor blacks cannot secure such jobs for lack of access to the ethnic networks that control the recruitment process. Similarly, Bardhan (2002) has noted that in developing countries the rural poor are often excluded from publicly provided services because of the capture of the local government. This capture by the local elite is facilitated by their social capital that works through “the multiplex interlocking social and economic relationships (that exist) among local influential people” (Bardhan 2002, 194). Finally, Smith (1776/1976) was the first to note the harmful influence of social networks of merchants in creating market distortions. On this, Smith famously stated,

People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices. It is impossible indeed to prevent such meetings, by any law which either could be executed, or would be consistent with liberty and justice. But though the law cannot hinder people of the same trade from sometimes assembling

together, it ought to do nothing to facilitate such assemblies; much less to render them necessary (Smith 1776/1976, 232).

While these “conspiracies” of traders can help the group members to safeguard their economic interests or perpetuate monopoly privileges, they certainly do not help the society at large.<sup>16</sup> In a similar vein, Olson (1982) also argues that the collusion of interest groups leads to unproductive rent-seeking activities and is harmful to economic development

Second, while social capital can provide the much-needed wherewithal for innovation and entrepreneurship, it can at the same time lead to individual lethargy and slothfulness. On one hand, social capital can help an entrepreneur in his effort to mobilize the much needed capital and information, it can on the other hand dilute one’s personal incentive to work hard. Social capital can lead to free riding, moral hazard, and the creation of welfare haven. The resources and hard work of those who succeed often need to underwrite the indolence and economic insolvency of those who fail. Social capital can thus be a safety net that penalizes successes and rewards failures. Geertz (1963) offers a concrete illustration from Bali where unsuccessful job-hunting and money-seeking kinsmen were found to be constantly draining and taxing successful entrepreneurs. Social capital, in conjunction with the redistributive social norm of many traditional societies, may represent a serious obstacle to accumulation and successful entrepreneurship.<sup>17</sup>

Third, while membership of a community has its advantages, it often enforces strict conformity, infringes on individual freedoms, and creates pressures for submission to mediocrity. Many independent-minded individuals consider these aspects of a community life suffocating—and have attempted to escape them for the freedom of a more impersonal urban life. As Hayami (1998) has noted, enlightenment philosophers such as Montesquieu considered traditional customs and norms as oppressing human minds. These traditional customs and norms, needless to emphasize, can have a similar dampening effect on the dynamics of

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<sup>16</sup>Sobel (2002) provides another interesting illustration by using the metaphors of the prisoner’s dilemma. When the prisoners cooperate with each other and do not confess they receive a brief sentence. This conspiracy of the culprits certainly makes the prisoners better off (relative to the equilibrium outcome), but not the rest of the society who would presumably want to see the criminals put behind bars.

<sup>17</sup>In developed countries, social networks can perpetuate a culture of poverty when the disadvantaged interact only amongst themselves. Such social networks among the poor are usually more efficient at supplying information on welfare eligibility than job availability. They also tend to create negative peer pressures—rather than positive role models—to nourish a culture of welfare dependency. A recent paper by Bertrand, Luttmer, and Mullainathan (2000) provides strong empirical support from the United States (US) in favor of this hypothesis. Their careful empirical work confirms the existence of a high degree of correlation between language-based social networks in a neighborhood and the extent of welfare dependency among groups (which are reliant on welfare).

economic development. In his theory of entrepreneurship, Schumpeter (1934 and 1950) discussed the concept of “industrial mutation”: how entrepreneurship helps propel the process of economic development in an evolving market economy. According to this concept, industrial mutation essentially entails a transition from personal capitalism, ensnared by traditional behavior, to rational capitalism, which “breaks the crust of convention” and thrives on the impersonal forces of the market.

Finally, social capital in the form of group membership can be as much a cause as a cure for poverty. Certain social and ethnic groups often find themselves trapped in a bad equilibrium of norms and values that are inimical to individual and collective development. A bad equilibrium, once established, is sustained by role model and peer group influences. Adhering to such a bad equilibrium is individually rational: it is optimal for individuals to subscribe to such group norms because any deviation results in social opprobrium and group retribution and hence lower individual welfare. However, the group—as well as the society as a whole—is worse off because it produces socially suboptimal behavior (behavior that is either destructive or risky). Teenage pregnancy, group crime and drug addiction are examples of such behavior, which is often sustained through group conformity.<sup>18</sup> When a network or group leads to such a bad equilibrium that sustains socially harmful norms and values, the members of the network or group and the society as a whole would then be better off if such a network or group did not exist.

## V. THE PROBLEMS WITH THE EMPIRICS OF SOCIAL CAPITAL

A sizeable empirical literature on social capital has emerged in recent years. A high-profile work that has brought social capital to the doorstep of the wider policy community, particularly in developed countries, is Putnam’s (2000) much-celebrated book, *Bowling Alone: The Collapse and Revival of American Community*.<sup>19</sup> In this book, Putnam attributes a whole variety of social ills in the US today—from declining voting participation to increasing crime rates to shrinking philanthropy—to lack of social capital. While the book puts forward an interesting

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<sup>18</sup>A recent article in the *The New York Times* (Songtag 2003) provides a poignant account of the failures of the Cambodian-American immigrants as an ethnic group who seem to be caught in a vicious circle of suboptimal outcomes. In particular, the story of Many Chout Uch, a gang member who faces deportation for crime, offers perceptive insights into the features of the community—its existing structure and group dynamic—that contains in itself the logic of such dire social failures.

<sup>19</sup>This book is a grandiose elaboration of his thesis contained in the earlier shorter article, Putnam (1995).

hypothesis<sup>20</sup> and culls together an impressive body of evidence, its empirical analysis remains rudimentary<sup>21</sup> and its discussion of policy somewhat cavalier. Notwithstanding these deficiencies, the important contribution of this work has been to stimulate research on social capital and its role in redressing social and economic problems.

Social capital has also been gaining popularity as a concept for analyzing the socioeconomic problems of developing countries. The emerging literature follows three major strands. The first strand deals with the link between economic growth and social capital. Some of the notable studies in this regard include Knack and Keefer (1997), Zak and Knack (2001), Collier and Gunning (1999), Easterly and Levin (1997), and Rodrik (1998). The first two papers confirm, in the context of cross-country growth regressions, the relationship between economic performances and trust in people. The last three studies argue that ethnically heterogeneous societies (implying lower level of social capital) are slow to growth or to adjust to external shocks.<sup>22</sup>

The second strand deals with the issue how social capital can substitute for missing capital and insurance markets. The contributions in this area include van Bastelaer (2000); Goldstein, DeJanvry, and Sadoulet (2001); Fafchamps and Lund (2003); and Morduch and Sicular (2001). The first study highlights the role of existing social capital ties in improving the poor's access to social capital. In group lending schemes, social ties among borrowers can help reduce transaction costs of screening, monitoring, and enforcement. The study by Goldstein, DeJanvry, and Sadoulet highlights the role of social capital as a social safety net mechanism in Ghana and identifies the factors that help shape the social connection that under-

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<sup>20</sup>A number of authors—for example, Paxton (1999) and Ladd (1996)—have contested the claim that there has been a decline in social capital in the United States.

<sup>21</sup>Much of the analysis is conducted in terms of bivariate graphical representation, which, as is well known, cannot distinguish between correlation and causality. The study also reports some multivariate regression results that seem to be marred by problems of omitted variables and unobserved heterogeneity.

<sup>22</sup>An interesting qualitative study that explores the relationship between trust and macroeconomic performance is Fukayama (1995). In this study, Fukayama classifies countries into low trust and high trust countries. According to his assessment, Germany, Japan, and US are high trust countries whereas PRC; France; Hong Kong, China; Italy; Republic of Korea; and Taipei, China are low trust countries. He argues that high trust countries have greater economic success as they can implement more efficient organizational innovations. When trust is limited to families, the supply of capital and qualified managers remains constrained, and this in turn restricts the scale of private family firms. While the basic hypothesis of Fukayama seems plausible, his classification of countries based on trust is highly impressionistic as is his much-vaunted empirical relationship between trusts and economic performance. As the recent record of economic performance of nations indicates, some of his low trust countries have made remarkable organizational innovations and registered stellar economic performance (for example, the PRC) whereas some of his high trust countries seem to be mired in near perpetual economic stagnation (for example, Japan).

pins the insurance mechanism. The Fafchamps-Lund study analyzes the role of networks of friends and relatives in providing mutual insurance in the Philippines. The final study by Morduch and Sincular (2001) analyzes the effectiveness of social capital as a risk-sharing mechanism in rural People's Republic of China (PRC) in the postreform period.

The third strand deals with the issue how social capital can help circumvent the collective action problem in the provision of local public goods. These studies include Ostrom (2000); Ostrom, Gardner, and Walker (1994); Bardhan (2001); Kikuchi, Fujita, and Hayami (2001); and Otsuka and Tachibana (2001). In their study of the irrigations system in developing countries, Ostrom and her collaborators analyze how social capital has been helpful in eliciting cooperation among farmers, evolving a common norm of behavior, and circumventing collective actions problems. The studies by Bardhan (2001) on the irrigation communities in South India; by Kikuchi, Fujita, and Hayami on the irrigation system in the Philippines; and by Otsuka and Tachibana (2001) on the community forestry in Nepal all offer interesting illustrations of the importance of social capital in the management of community resources.

As a cursory review of the empirical literature on social capital would suggest, the literature is diverse in terms of methodology and the degree of analytical sophistication. Some of it is descriptive—and does little beyond suggesting the importance of social capital (in whatever sense the term is defined in the particular context). Some of it is more quantitative, often involving regression-type analysis. However, a large segment of this quantitative literature suffers from various technical, econometric problems.

In a recent paper, Durlauf (2002) examines the estimation problems that are common to the social capital literature. While many of these problems are, at some level, endemic to a wide body of the empirical studies, they seem to be particularly serious for the social capital literature. In the words of Durlauf (2002, F474):

The empirical social capital literature seems to be particularly plagued by vague definition of concepts, poorly measured data, absence of appropriate exchangeability conditions, and lack of information necessary to make identification claims plausible. These problems are particularly important for social capital contexts as social capital arguments depend on underlying psychological and sociological relations that are difficult to quantify, let alone measure.

Further discussing these problems, Durlauf notes in the context of three benchmark empirical studies<sup>23</sup> three sets of estimation issues. First, social capital

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<sup>23</sup>The putative rationale for choosing these three studies has been that they are well regarded in the social science literature and analyze the social capital issues in different

studies often fail to distinguish between social and nonsocial-capital effects that arise from group membership. However, this problem of identification is not resolved by incorporating a full range of alternative group influences; it requires a clear definition of social capital and conceptualization of the underlying causal process. Second, social capital proxies are often endogenous and this requires the use of instrumental variables based on ad hoc exogeneity assumption. However, constructing credible instrumental variables in this type of regression requires a theory of the determinants of social capital. Third, social capital regression exercises rely on untenable comparability assumptions.<sup>24</sup> That is, the analysis assumes that the regression uses comparable objects as observations. This problem is particularly serious in aggregative growth regression studies.<sup>25</sup> In light of these problems, Durlauf suggests that empirical analyses on social capital need to step back from “grandiose approaches” and limit themselves to more specific sociological dimensions of individual behavior and rely on the use of more experimental data.

## VI. CONCLUDING REMARKS

As the foregoing discussion suggests, social capital has come to signify different things to different authors. Given the wide diversity of notions associated with the term social capital, the concept has remained largely amorphous and lacks the clarity and precision required of a concept to be used for rigorous empirical work.

contexts: one at the individual level in the US, another at the individual level in a developing country, and still another at the national level, involving cross-country regression analysis. Furstenberg and Hughes (1995) explore, with data from Baltimore (US), how the probability of an individual dropping out of school is related to social capital factors such as the presence of a father in the household and the educational aspirations of the person’s friends. Narayan and Pritchett (1999) examine the role of social capital in the form of membership of groups in influencing household outcomes in rural Tanzania. Finally, Knack and Keefer (1997) examine in the context of a cross-country regression framework the impact of social capital—such as civic cooperation and trust—on economic growth.

<sup>24</sup>As quoted by Durlauf (2002), Draper et al. (1993, 1) describes the importance of exchangeability in empirical exercises in the following manner: “Statistical methods are concerned with combining information from different observational units and with making inferences from the resulting summaries to perspective measurements on the same or other units. These operations will be useful only when the units to be combined are judged to be similar (comparable or homogenous).”

<sup>25</sup>As is now widely known, results of cross-country growth regressions are often extremely fragile. These types of exercises have been subject to considerable criticism by both economic theorists and econometricians. Growth theorists find the empirical equations ad hoc without any sound analytical basis, while econometricians complain about the various technical econometric problems—such as unobserved fixed effects, measurement errors, endogeneity, parameter heterogeneity etc.—that sully the effort. See Quibria (2002) for further details on this.



Notwithstanding this limitation, recent years have seen a mushrooming of a literature that applies many different notions of social capital to analyze many diverse economic and social issues. Despite its exaggerated claims, as Portes and Landolt (1996) rightly note, much of this literature does not go beyond calling attention to “the possible individual and family benefits of sociability” or “a nuanced understanding of the pros and cons of groups and communities.” The policy conclusions are often very banal.<sup>26</sup> Durlauf (2002, F459) is even more stark in his criticism of the empirics of social capital when he asserts that “whether these (social capital) studies establish the empirical importance of social capital in understanding the various socio-economic outcomes, my conclusion is no.” These assessments are obviously neither very salutary nor do they provide a clean bill of health regarding the state of quantitative empirical research in this area.

To move the literature forward, it would be useful first to get the concept right. It should begin with the acknowledgement that there is no single entity called social capital, but many distinct notions—such as trusts, norms, culture, community, and networks—highlighting different aspects of nonmarket social interactions. It is heartening to note that recent works in this area, particularly in economics, seem to reflect this heterogeneity of perspectives, focusing on different aspects of social interactions and drawing distinctly different analytical and policy implications. However, to avoid confusion and to achieve greater analytical traction and empirical understanding, social capital studies need to proceed with a clear definition of the specific notion of social capital being applied.<sup>27</sup>

As noted earlier, despite the recent proliferation of studies in social capital, this has not been accompanied by a commensurate increase in analytical rigor. Analytical rigor does not necessarily mean heavy reliance on quantitative methods. Historical and qualitative studies can be as much rigorous and informative about the underlying social capital mechanisms as the regression studies that are the bread and butter of economists. Indeed, there are certain questions that are bet-

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<sup>26</sup>In a recent paper, Costa and Kahn (2003) surveys the proliferating economic literature on the determinants of civic engagement in a community. This survey covers about 15 studies encompassing different nations, different social capital measures, and different time periods. The central policy message that emerges from this survey, as the authors report, is “heterogeneity reduces civic engagement.” This message, which should surprise nobody, provides precious little guidance for policies. As much of the heterogeneity takes the form of ethnic and racial diversity, it is not amenable to policy manipulation—except by odious political means! Hence, this type of message is cold comfort to real world policymakers!

<sup>27</sup>This definition is important to guide empirical analysis—in particular, its choice of the social-capital indicator. Different social-capital indicators—even if we assume they are interconnected and reflect the different attributes of the underlying social-capital process—do not move in sympathy. Fischer (2001) examines seven indicators of social capital—trusting most people, church attendance, belonging to organizations, socializing with neighbors, socializing with friends outside the neighborhood, and giving money to charity—from the General Social Surveys (1972-1999) and finds little coherence among them. The different indicators often display little correlation, and they even sometimes exhibit opposite trends.

ter addressed in broad qualitative terms than others, which may require greater reliance on the quantitative approach. However, the success of the quantitative studies depends on the availability of the relevant and reliable data.

Measuring social capital, which is often vested in such entities as trust, community, peer pressure, role models, and networks, is difficult. The task becomes doubly difficult if this measurement needs to incorporate both quality and quantity. However, further progress with the empirical analysis of social capital is inextricably connected with the availability of better quality data. However, this is not easily obtained. Data on social capital have been sourced in a number of different ways. First, surveys of perceptions can be a major source. However, they are often an imperfect source, as the respondents to surveys have no incentive to answer honestly or carefully.<sup>28</sup> Second, the standard practice in empirical social sciences including economics is to infer the nature of economic and social interactions from observations of outcome data. However, such outcome data have limited ability to discriminate among alternative hypotheses regarding the underlying processes.<sup>29</sup> Finally, economic experiments can be an important source of data on social capital. As social capital concepts relate to social interactions involving subjective processes, it is therefore only natural that social capital studies rely considerably on experimental and subjective data. However, this is something that until recently, with perhaps the exception of social psychologists,<sup>30</sup> aroused very little enthusiasm among economists and other social scientists.

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<sup>28</sup>The emerging experimental literature confirms this divergence. In a recent paper, Bertrand and Mullainathan (2001) provide a more in-depth discussion with illustrative examples why such subjective survey data can be misleading.

<sup>29</sup>An exception to this includes the social capital data collected by the World Bank under the rubric of Social Capital Assessment Tool, which specifies in sufficient detail the level of individual interactions at the household, community, and organization levels. I am indebted to a referee for bringing this to my attention.

<sup>30</sup>An interesting recent study that relies on such experimental data is Glaeser et al. (2000). The study uses a sample of Harvard undergraduates to carry out two experimental trust games and generate data on trust. They also make a survey about trustworthiness. The survey and the experiments together provide a number of empirical results regarding trust and trustworthiness. These results include: trusting behavior and trustworthiness rise with social connections and decrease with differences in race and nationalities; while certain individuals appear to be persistently more trusting, they do not reveal that they are more trusting in their surveys: and people behave in a more trustworthy manner toward individuals of higher social status. What is to be noted is the difference between the survey and the experimental results.

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