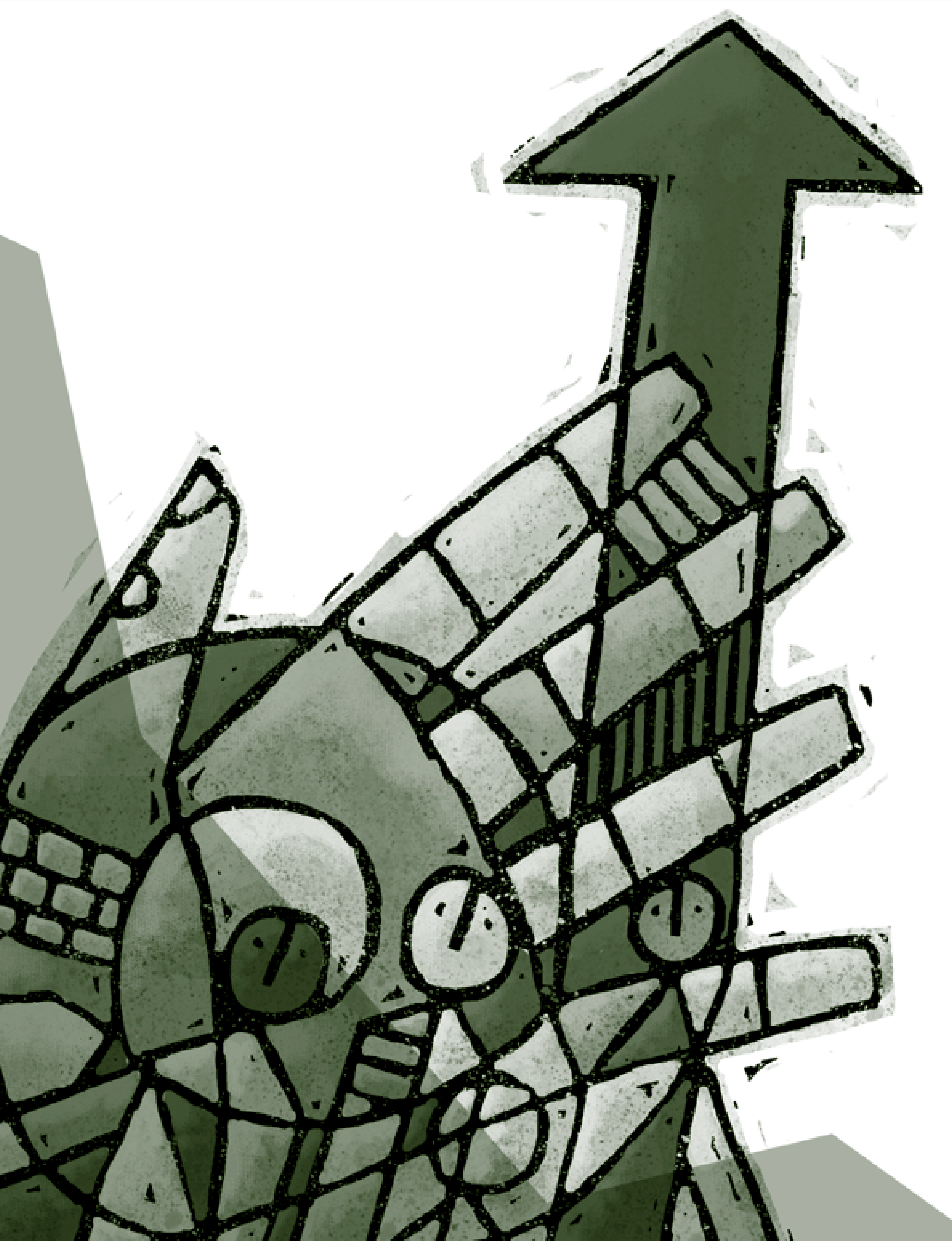


The Place of Social Capital in Understanding Social and Economic Outcomes

BY **MICHAEL WOOLCOCK**

RÉSUMÉ ▸ Ce document constitue une brève introduction aux récents ouvrages théoriques et empiriques sur le capital social tel qu'il s'applique aux questions de développement économique, avec un accent particulier sur sa signification pour les pays de l'OCDE. Il passe en revue les preuves empiriques à l'appui des hypothèses clés concernant le développement économique, spécialement la relation entre les institutions officieuses et officielles, et leur capacité collective de gérer le risque. Il explore les conséquences d'une théorie générale du capital social sur la croissance économique dans les pays de l'OCDE. L'article répond à trois questions spécifiques : 1. Comment le capital social, le capital humain et la capacité sociale sont-ils reliés les uns aux autres ? 2. Comment le capital social peut-il être mesuré ? 3. Comment les modèles de croissance économique existants pourraient-ils prendre en compte le capital social de façon adéquate ?

ABSTRACT ▸ This paper provides a brief introduction to the recent theoretical and empirical literature on social capital as it pertains to economic development issues, with a particular focus on its significance for OECD countries. It reviews the empirical evidence in support of key hypotheses pertaining to economic development, especially the relationship between informal and formal institutions and their collective capacity to manage risk, and explores the implications of a general theory of social capital for economic growth in OECD countries. The paper addresses three specific questions: (1) How are social capital, human capital and social capability related to one another?; (2) How can social capital be measured?; and (3) How might existing economic growth models give more adequate attention to social capital?

ILLUSTRATIONS : NORMAND COUSINEAU

It is hardly possible to overrate the value...of placing human beings in contact with persons dissimilar to themselves, and with modes of thought and action unlike those with which they are familiar... Such communication has always been, and is peculiarly in the present age, one of the primary sources of progress.

JOHN STUART MILL

What is social capital? How does it differ from human capital and social capability?

"It's not what you know, it's *who* you know." This common aphorism sums up much of the conventional wisdom regarding social capital. It is wisdom born of our experience that gaining membership to exclusive clubs requires inside contacts, that close competitions for jobs and contracts are usually won by those with "friends in high places." When we fall upon hard times we know it is our friends and family who constitute the final "safety net." Less instrumentally, some of our happiest and most rewarding hours are spent talking with neighbours, sharing meals with friends, participating in religious gatherings and volunteering on community projects.

Intuitively, then, the basic idea of social capital is that one's family, friends and associates constitute an important asset, one that can be called upon in a crisis, enjoyed for its own sake, and/or leveraged for material gain. Those communities endowed with a rich stock of social networks and civic associations will be in a stronger position to confront poverty and vulnerability,[1] resolve disputes,[2] and/or take advantage of new opportunities.[3] Conversely, the *absence* of social ties can have an equally important impact. Office workers, for example, fear being "left out of the loop" on important decisions; ambitious professionals recognize that getting ahead in a new venture typically requires an active commitment to "networking," i.e., to creating the social connections they currently lack.

Intuition and our everyday language also recognize an additional feature of social capital, however. They acknowledge that social capital has costs as well as benefits, that social ties can be a liability as well as an asset.[4] Most parents, for example, worry their teenage children will "fall in with the wrong crowd," that peer pressure and a strong desire for acceptance will induce them to take up harmful habits. At the institutional level, many countries and organizations (including the World Bank) have nepotism laws, in explicit recognition that personal connections can be used to unfairly discriminate, distort and corrupt. In our everyday language and life experience, in short, we find that the social ties we have can be both a blessing and a blight, while those we do *not* have can deny us access to key resources. These features of social capital are well documented by the empirical evidence and have important implications for economic development and poverty reduction.

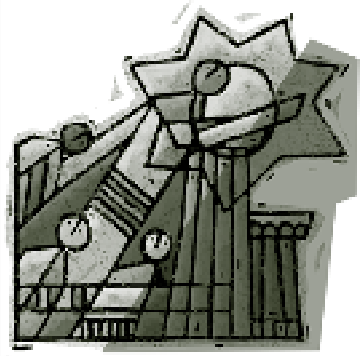
The most compelling empirical evidence in support of the social capital thesis comes from household and community level (i.e., micro) studies, drawing on sophisticated measures of community networks, the nature and extent of civic participation and exchanges among neighbours. In the OECD countries, the most comprehensive findings have emerged from urban studies,[5] public health[6] and corporate life,[7] the unifying argument being that, controlling for other key variables, the well-connected are more likely to be housed, healthy, hired and happy. Specifically, they are more likely to be promoted faster, receive higher salaries, be favorably evaluated by peers, miss fewer days of work, live longer, and be more efficient in completing assigned tasks.

Social capital has entered debates about economic performance on its ambitious claim to constituting an independent—and hitherto under-appreciated—factor of production. The classical economists identified land, labour and *financial* capital (i.e., levels of investment) as the three basic factors shaping economic growth, to which in the 1950s Robert Solow introduced the importance of technolology (*physical* capital). In 1960s, neo-classical economists such as T. W. Schultz and Gary Becker introduced the notion of *human* capital, arguing that a society's endowment of educated, trained and healthy workers determined how productively the orthodox factors could be utilized. The latest equipment and most innovative ideas in the hands or mind of the brightest, fittest person, however, will amount to little unless that person also has access to others to inform, correct, assist with and disseminate their work. Life at home, in the boardroom, or on the shop floor is both more rewarding and productive when suppliers, colleagues, and clients alike are able to combine their particular skills and resources in a spirit of co-operation and commitment to common objectives. In essence, where human capital resides in individuals, social capital resides in relationships. Human and social capital are complements, however, in that literate and informed citizens are better able to organize and evaluate conflicting information and express their views in constructive ways. Schools which are an integral part of community life, nurture high parental involvement, and actively expand the horizons of students see their students achieve higher test scores.[8]

Much of the interest in social capital among economists, however, has been fueled by a definition that includes not only the structure of networks and social relations, but behavioral dispositions (such as trust, reciprocity, honesty) and institutional quality measures ("rule of law," "contract enforceability," "civil liberties," etc.,).[9] This more all-encompassing approach is appealing to some because of the existence of large, cross-national datasets (e.g., the World Values Survey, Gastil indexes, Freedom House scores), which permit social capital—now measured by country-level trust and governance scores—to be entered into macro-economic growth regressions.

Conceptualizing social capital across units of analysis ranging from individuals to institutions and nations, however, renders it susceptible to the criticism that it has become all things to all people (and hence nothing to anyone). A brief discussion of the debates surrounding the definition of social capital may help to address these concerns. First, although a variety of approaches have been used to describe social capital, there is an emerging consensus across the social sciences concerning its definition, one built on an increasingly solid empirical foundation. The definition can be summarized as follows: Social capital refers to the norms and networks that facilitate collective action. Second, it is important that any definition of social capital focus on its sources rather than consequences, i.e., on what social capital *is* rather than what it *does*. This approach eliminates an entity such as "trust" from the definition of social capital. Trust is doubtless vitally important in its own right but for our present purposes is more accurately understood as an outcome (of repeated interactions, of credible legal institutions, of reputations).

The well-connected are more likely to be promoted faster, receive higher salaries, be favorably evaluated by peers, miss fewer days of work and live longer.



Third, for clarity's sake, social capital makes most sense when it is understood as a relational (i.e., sociological), rather than psychological (individual) or political (institutional/national) variable. More important, the best and most coherent empirical research on social capital, *irrespective of discipline*, has operationalized it as a sociological variable.[10] Empirical evidence should also be the basis for criticizing the use and efficacy of social capital; if the term is facile or distracting, as some maintain,[11] then this should be demonstrated empirically, not refuted polemically. Given the ever-accumulating weight of evidence documenting the significance of social capital, however, the burden of proof is rapidly shifting to the detractors. A virtue of adopting a relatively narrow and agreed-upon definition is that it encourages supporters and sceptics alike to play by the same rules.

Fourth, to accommodate the range of outcomes associated with social capital, it is necessary to recognize the multi-dimensional nature of its sources. The most common and popular distinction is between "bonding" and "bridging" social capital.[12] The former refers to relations among family members, close friends and neighbours, the latter to more distant friends, associates and colleagues. Bridging is essentially a horizontal metaphor, however, implying connections between people who share broadly similar demographic characteristics. As Fox and Heller have stressed,[13] social capital also has a vertical dimension; poverty is largely a function of powerlessness and exclusion, and as such a key task for development practitioners and policy makers is ensuring that the activities of the poor not only "reach out," but are also "scaled up." An important component of this strategy entails forging alliances with sympathetic individuals in positions of power, an approach Hirschman wryly calls "reform by stealth."[14] To further extend the Hirschmanian discourse, this vertical dimension can be called "linkages." The capacity to leverage resources, ideas and information from formal institutions beyond the community is a key function of linking social capital. A multi-dimensional approach allows us to argue that it is different *combinations* of bonding, bridging, and linking social capital that are responsible for the range of outcomes we observe in the literature, and to incorporate a dynamic component in which optimal combinations change over time.

Fifth, it is important to stress that a narrowly sociological definition of social capital—i.e., one centered on networks within, between and beyond communities—must not blind us to the institutional context within which these networks are embedded, especially the role of the state. Indeed, the vibrancy or paucity of social capital cannot be understood independently of its broader institutional environment: communities can be highly engaged because they are mistreated or ignored by public institutions (e.g., providing their own forms of credit and security because banks and police refuse to do so), or because they enjoy highly complementary relations with the state. As a number of economists and anthropologists have noted,[15] the absence, or weakness, of formal institutions is often compensated for by the creation of informal organizations.[16] As such, I caution against explanations of the rise and fall of social capital—and policy arguments for enhancing or reviving it—that occur in an institutional vacuum. Weak, hostile or indifferent governments have a profoundly different effect on community life (and development projects), for example, than governments that respect civil liberties, uphold the rule of law, and resist corruption.

Responding to the critics

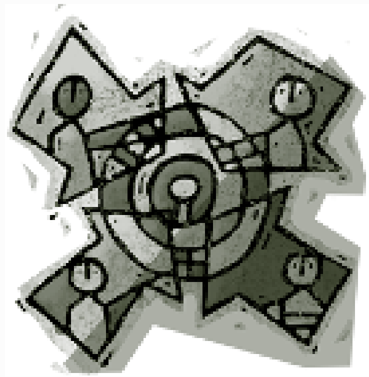
Social capital's rise to prominance has, not surprisingly, met with a backlash in some quarters. In addition to concerns about conceptual overreach and lack of empirical specificity discussed above, a number of additional questions have been raised. Some of these are legitimate, of course, and need to be addressed, since no idea or agenda is well served by advocates who fail to take stock on a regular basis, who romanticize community, and who do not acknowledge and attend to weaknesses. Many of these concerns are simply unfounded, however, or at least do not constitute grounds for dismissal. In this section I outline and respond to four issues raised by the critics.

Social capital is flawed, say the critics, because:

- *it just repackages old ideas; is more style (good "marketing") than substance;*

The "good marketing" aspect of this claim is true, but that does not make it a flaw. The hype surrounding social capital, like any "product," would have collapsed under its own weight long ago if there was not a sufficiently rigorous empirical foundation on which it was built, and if a broad constituency of people did not "buy it." But the foundation is strong and expanding, and the audience wide and deep. Sociology for too long has been content to let its key ideas trade under obscure, jargon-laden terminology that has little resonance with other disciplines or (more important) the general public. The idea of social capital is at heart a pretty simple and intuitive one, and it consequently speaks to a lot of different people. Without unduly compromising itself, the idea of social capital gives classical (and contemporary) sociological themes a voice they would not otherwise have.

A narrowly sociological definition of social capital must not blind us to the institutional context within which these networks are embedded, especially the role of the state.



- *it is merely the latest social scientific fad/buzz word;*

The downside of successfully marketing a new but still imprecise idea is that a lot of people try to ride its coattails. Such people seek to procure credibility for their work by calling what they do "social capital research," even if they have only a passing knowledge of how most others have used the term. Repeated too many times, it creates a situation where social capital does indeed appear to be all things to all people. Although the number of studies continue to expand exponentially, a coherent and rigorous core is emerging. As a consensus (of sorts) is reached about its definition and theoretical underpinnings, the difference between the contenders and pretenders will become much clearer. It is important to note that there is also a demand-side component to social capital's recently popularity, in that it satisfies a conceptual void in both mainstream economic and social theories of development about how to deal seriously with the social dimensions. As long as that void exists, and as long as the idea of social capital can convincingly fill it, the buzz should be welcomed, not scorned.

- *it encourages and rewards "economic imperialism" (social relations as "capital"?);*

The idea of social capital has been developed primarily by economic sociologists and as such provides as much opportunity for "sociological imperialism" as for opening the floodgates to economists and "economism" (or economic rationalism, as it is called in Australia). In the end, however, I'm not convinced that this kind of imperialism is really all that bad in either direction. Disciplines should have the confidence of their convictions; there are no laws saying who can or should study what subject with what tool kit, and the prize should go to those who provide the most compelling answer to the most important questions. To the extent we live in a world where the dominant ideas—in both popular discourse and public policy—are those of economics, we should welcome windows of opportunity both for modifying the more extreme elements of those ideas, and for having a concrete alternative to those ideas. To talk of social relations as "capital," for example, is not sociological heresy or a sell-out to economics: it simply reflects the reality that our social relationships are one of the ways in which we cope with uncertainty (returning to our family when we lose our job), extend our interests (using alumni networks to secure a good job) and achieve outcomes we could not attain on our own (organizing a parade). Perhaps social capital's greatest quality, however, is that it helps transcend the imperialism wars altogether, providing a common discourse across disciplinary, sectoral and methodological divides.

- *it neglects considerations of power, especially for those who are relatively powerless.*

Social capital has been appropriated by scholars, activists and policy makers spanning the political spectrum (an interesting fact in and of itself), so it is possible to read the literature selectively and arrive at the above conclusion. A more complete reading, however, reveals that a social capital perspective can be used not only to help explain the emergence and persistence of power relations, but—perhaps more important—to provide a constructive basis for doing something about it. It is one thing to recognize, for example, that poverty is caused in part by the exclusion of certain marginalized groups from public, private and civic institutions; it is quite another to say what should happen next. Marxist theory predicts and promotes revolution on an assumption of shared interests among disenfranchised groups; neo-classical theory assumes markets (formal and informal) will emerge of their own accord to reach an efficient equilibrium; modernization theory advocates the wholesale transformation of all traditional social relationships if greater prosperity is to be attained. At its best, a social capital perspective recognizes that exclusion from these institutions is created and maintained by powerful vested interests, but that marginalized groups themselves possess unique social resources that can be used as a basis for overcoming that exclusion, and as a mechanism for helping forge access to these institutions. Intermediaries such as NGOs have a crucial role to play in such a process, because it takes a long time to earn both the confidence of the marginalized, and the respect of institutional gatekeepers. In short, it takes an articulated effort of both "top-down" and "bottom-up" to help overcome this exclusion, but it can be, has been and is being done, with positive and lasting results.

Social capital and models of economic growth: getting the social relations right

The social capital literature is one to which all the social science disciplines have contributed, and it is beginning to generate a remarkable consensus regarding the role and importance of institutions and communities in development. Indeed, one of the primary benefits of the idea of social capital is that it is allowing scholars, policy makers and practitioners from different disciplines to enjoy an unprecedented level of co-operation and dialogue.[17] In reviving and revitalizing mainstream sociological insights, there has been a corresponding appreciation that different disciplines have a vital, distinctive and frequently complementary contribution to offer to inherently complex problems. Another important feature of the social capital approach is its approach to understanding poverty. Living on the margins of existence, the social capital of the poor is the one asset they can potentially draw upon to help negotiate their way through an unpredictable and unforgiving world. As Dordick astutely notes,[18] a the very poor have "something left to lose," namely each other. While much of the discourse surrounding poor people and poor economies is one of deficits, a virtue of the social capital perspective is that it allows theorists, policy makers and practitioners to take an approach that recognizes the assets of poor communities.

If, as I have argued, we should adopt a relatively narrow sociological definition of social capital but understand it as inherently embedded in an institutional context, where does this leave us in applying social capital to questions of economic growth? What relevance does a social theory of norms and networks have for minders of regional and national economic performance in OECD countries?

This question can be answered in several ways, but I will identify four. The first is that social capital, so understood, should mind its own business, focus on communities and leave macro-economic concerns to the experts. A second response is to search for existing proxies for network size and structure, and simply add them to the catalogue of other variables deemed significant for growth. A third answer is to do the hard work of integrating serious qualitative and quantitative research strategies into the design of comprehensive new instruments to measure social capital more accurately. A fourth strategy is to take the central ideas underlying the social capital perspective (the "spirit" of social capital, if you will), and apply them in innovative ways to broader issues of political economy. Of these answers, the first is overly modest, the second overly ambitious. The third is a desirable long-run objective, the fourth an intriguing possibility with more immediate returns. Needless to say, I cast my lot with champions of answers three and four. In the remaining space, let me sketch out these positions in further detail.

Toward new, better, more comprehensive measures

For social capital to become a serious indicator of regional and national well-being, measures of it need to be drawn from large representative samples, using indicators that have been pre-tested and refined for their suitability. Such efforts have been conducted in a number of countries, such as Australia and the United kingdom,[19] with the distinct possibility that social capital questions may soon be included in the census of several OECD countries. In developing countries, such as Guatemala, the highly acclaimed Living Standards Measurement Survey (LSMS)—the standard bearer for high quality data on income, expenditure, health and education—is about to incorporate a social capital module, the first of its kind. Just as this survey will enable us to make reliable national-level estimates of poverty, education and health, so too will it provide more or less comparable data on social capital. The quantitative measures to be gleaned from this survey of 9000+ representative households will be complemented by a major qualitative analysis at the village level. With data of this scale and quality, there is a strong possibility that social capital will soon find its way into the mainstream of familiar economic measures used to take the pulse of society (unemployment rates, consumer price indexes, inflation levels and the like).

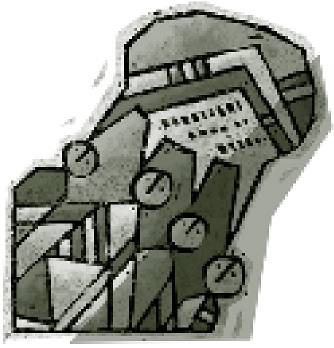
It is important to stress that, while gathering hard data is indispensable, the qualitative aspects of social capital should not be neglected. In many respects it is something of a contradiction in terms to argue that universal measures can be used to capture local idiosyncratic realities. At a minimum, this means that the construction of survey instruments to measure social capital should follow intensive periods in the field, ascertaining the most appropriate way to ask the necessary questions. This has been a feature of the work of the Saguaro Seminar at Harvard University studying social capital in the United States and, more modestly, of my own efforts (with Vijayendra Rao and several Indian colleagues) to understand the risk management functions of social capital in the slums of Delhi. In an age of electronic communications and busy schedules it is all too easy to download other people's surveys, append them to your own, and march off to the field with noble intentions. Previous efforts should be a guide to, but not a substitute for, doing the hard work that social capital research entails. Clean models and dirty hands are both required.

Incorporating the spirit of social capital into political economy and public policy

The policy response to reading the social capital literature should not be a call for more choirs and soccer clubs, as readers satirizing Putnam have tended to infer. Social capital is not a panacea, and more of it is not necessarily better. But the broader message rippling through the social capital literature is that how we associate with each other, and on what terms, has enormous implications for our well-being, whether we live in rich or poor countries. As such, a number of important findings that have recently emerged independently from the political economy literature, though they (rightly) avoid the social capital terminology, are entirely consistent with the emerging social capital perspective.

To see why, recall the three dimensions of social capital outlined above, and my insistence that they be understood in the context of their institutional environment. If it is true that meager stocks of bridging social capital make it more difficult for ideas, information and resources to circulate among groups, then it follows that larger economic, social and political forces that divide societies will be harmful for growth. Economic inequality, and overt discrimination along gender and ethnic lines, for example, should be harmful for growth. Similarly, if leveraging social capital is an important risk management strategy during times of economic distress (e.g., losing a job, enduring crop failure, suffering a prolonged illness), it follows that divided societies will experience greater difficulty managing economic

The idea of social capital is allowing scholars, policy makers and practitioners from different disciplines to enjoy an unprecedented level of co-operation and dialogue.



shocks. Moreover, my emphasis on understanding the efficacy of social capital in its institutional context implies that how communities manage both opportunities and risk will be necessarily dependent on the quality of the institutions under which they live. Rampant corruption, frustrating bureaucratic delays, suppressed civil liberties, failure to safeguard property rights and uphold the rule of law forces communities back on themselves, demanding that they supply privately and informally what should be delivered publicly and formally. Accordingly, in countries where these conditions prevail, there should be little to show for even the most well-intentioned efforts to build schools, hospitals and encourage foreign investment.

Recent work by Dani Rodrik[20] and William Easterly[21] provides powerful econometric evidence in support of the idea that economic growth in general, and the ability to manage shocks in particular, is the twin product of coherent public institutions and societies able to generate what Easterly calls a "middle class consensus." Countries with divided societies (along ethnic and economic lines) and weak, hostile or corrupt governments are especially prone to a growth collapse. When shocks hit — as they did in the mid-1970s and early 1980s—these countries proved unable and/or unwilling to make the necessary adjustments. Lacking well-established precedents, procedures and institutional resources for managing conflict, these economies experienced a major growth collapse from which some have still not recovered.

For students of economic growth in the 1960s, it was hard to adjudicate among the merits of different strategies, as all economies—open/closed, natural resources/manufacturing, landlocked/coastal, temperate/tropical, large/small—did relatively well. The real test came with the oil crises of the 1970s and the global recession of the early 1980s, which produced a growth collapse in the developing economies of Grand Canyon proportions, one that did not end until 1995. The devastating growth collapse of 1975-1995 set back by at least a decade the level of economic development that would have been attained had the 1955-1974 growth trajectory been maintained.

So, while social capital scholarship per se is surely on the safest ground when it speaks to community development issues, the spirit of social capital is also consistent with findings now emerging in studies of macro-economic growth. It is in this sense that I think social research on economic issues and economic research on social issues is reaching a remarkable—but largely unacknowledged—consensus. More dialogue and diplomacy among social scientists, rather than perennial civil war, might enable us to harness these collective insights in the joint pursuit of a more productive and inclusive global economy.

Conclusion

For both countries and communities, then, rich and poor alike, managing risk, shocks and opportunities is a key ingredient in the quest to achieve sustainable economic development. Whether shocks manifest themselves as terms of trade declines, natural disasters, strikes, disputes over access to water, domestic violence or the death of a spouse, those social entities able to weather the storm will be those that are more likely to prosper. A social capital perspective seeks to go beyond primordial "cultural explanations" for these different response strategies, to look instead for structural and relational features. Development is more than just a matter of playing good defence (or getting by), however; it also entails knowing how to initiate and maintain strategic offence (getting ahead). From large public-private partnerships to village-level development programs, success turns on the extent to which ways and means can be found to forge mutually beneficial and accountable ties among different agents and agencies of expertise. It is in this sense that I argue that "getting the social relations right"[22] is a crucial component of both the means and ends of development. If the idea and the ideals of social capital help move us in this direction—and do so by encouraging and rewarding greater cross-fertilization between disciplines and methodologies, and between scholars and policy makers— then it more than justifies its place in the new development lexicon.

Michael Woolcock is with the Development Research Group of the World Bank and the John F. Kennedy School of Government at Harvard University. This paper draws on M. Woolcock, *Using Social Capital: Getting the Social Relations Right in the Theory and Practice of Economic Development* (Princeton, NJ: Princeton University Press, forthcoming) and M. Woolcock and D. Narayan, "Social capital: implications for development theory, research, and policy," *World Bank Research Observer*, Vol. 15, no. 2 (2000), pp. 225-250. The author wishes to thank Thomas Healy and Sylvain Cote for comments on an earlier draft. The views expressed in this paper are entirely those of the author and should not be attributed to the World Bank, its executive directors or the countries they represent.

Endnotes

1. D. Narayan "Voices of the Poor: Poverty and Social Capital in Tanzania," ESSD Studies and Monographs Series, Vol. 20 (Washington, DC: The World Bank, 1997).
2. K. Schafft and D. Brown, "Social capital and grassroots development: the case of Roma self-governance in Hungary," *Social Problems* (forthcoming).
3. J. Isham, "The effect of social capital on technology adoption: evidence from rural Tanzania," paper presented at the annual meeting of the American Economic Association, New York City (1999).
4. Indeed, an early criticism of the social capital literature was that it failed to appreciate the forms and consequences of these costs. For members of cults, for example, group loyalties may be so binding that attempts to leave result in death; some successful members of immigrant communities have reportedly Anglocized their names to divest

themselves of obligations to support subsequent cohorts. More onerously, the destructive acts of hate groups, drug cartels and terrorist organizations may impose enormous burdens on society as a whole.

5. See, for example, R. Gittell and A. Vidal, *Community Organizing: Building Social Capital as a Development Strategy* (Newbury Park, CA: Sage Publications, 1998); R. Sampson, J. Morenhoff and F. Earls, "Beyond social capital: spatial dynamics of collective efficacy for children," *American Sociological Review*, Vol. 64, no. 5 (1999), pp. 633-660.

6. I. Kawachi, B. Kennedy and R. Glass, "Social capital and self-rated health: A contextual analysis," *American Journal of Public Health*, Vol. 89 (1999), pp. 1187-1193; I. Kawachi and L. Berkman, "Social cohesion, social capital and health," in L. Berkman and I. Kawachi (eds.) *Social Epidemiology* (New York: Oxford University Press, 2000).

7. R. Burt, "The network structure of social capital," in R. Sutton and B. Shaw (eds.) *Research in Organizational Behavior* (Greenwich, CT: JAI Press, 2000); R. Fernandez, E. Castilla and P. Moore, "Social capital at work: networks and employment at a phone center," *American Journal of Sociology*, Vol. 105, no. 5 (2000), pp. 1288-1356.

8. S. Morgan and A. Sorensen, "Parental networks, social closure, and mathematical learning: a test of Coleman's social capital explanation of school effects," *American Sociological Review*, Vol. 64, no. 5 (1999), pp.661-681.

9. On social capital as a behavioural attribute of *individuals*, see E. Glaeser, D. Laibson and B. Sacerdote "The economic approach to social capital," Cambridge, MA: NBER Working Paper No. 7728 (2000). For a review of the macro literature on social capital, see J. Temple, "Growth effects of education and social capital in the OECD," Oxford University, mimeo (2000).

10. See M. Foley and B. Edwards, "Is it time to disinvest in social capital?" *Journal of Public Policy*, Vol. 19 (1999), pp. 141-173.

11. B. Fine, "The developmental state is dead? long live social capital?" *Development and Change*, Vol. 30 (1999), pp. 1-19.

12. Gittell and Vidal, *op cit.*

13. J. Fox, "How does civil society thicken? The political construction of social capital in rural Mexico," *World Development*, Vol. 24, no. 6 (1996), pp. 1089-1103; P. Heller, "Social capital as a product of class mobilization and state intervention: industrial workers in Kerala, India," *World Development*, Vol. 24, no. 6 (1996), pp. 1055-1071.

14. A. Hirschman, *Journeys toward Progress: Studies of Economic Policy-Making in Press* (New York: Greenwood Publishing Group, 1968).

15. See, for example, T. Besley and S. Coate, "Group lending, repayment incentives, and social collateral," *Journal of Development Economics*, Vol. 46 (1995), pp. 1-18; W. Davis, "Vanishing cultures," *National Geographic*, Vol. 196, no. 2 (1999), pp. 62-89.

16. D. Naryan, "Bonds and bridges: social capital and poverty," Policy Research Working Paper No. 2167 (Washington, DC: The World Bank, 1999).

17. D. Brown, "Creating social capital: nongovernmental development organizations and intersectoral problem solving," in W.W. Powell and E. Clemens (eds.) *Private Action and the Public Good* (New Haven: Yale University Press, 1998).

18. G. Dordick, *Something Left to Lose: Personal Relations and Survival among New York's Homeless* (Philadelphia, PA: Temple University Press, 1997).

19. On Australia, see I. Winter (ed.) *Social Capital and Public Policy in Australia* (Melbourne: Australian Institute of Family Studies, 2000); on the United Kingdom, see P. Hall, "Social capital in Britain" *British Journal of Political Science* Vol. 29 (1999), pp. 417-461.

20. D. Rodrik, *The New Global Economy and Developing Countries: Making Openness Work* (Baltimore, MD: Johns Hopkins University Press, 1999), and "Where did all the growth go? External shocks, social conflicts, and growth collapses," *Journal of Economic Growth*, Vol. 4, no. 4 (1999), pp. 385-412.

21. W. Easterly, "The middle class consensus and economic development," *Policy Research Working Paper* 2346 (Washington, DC: The World Bank, 2000).

22. Woolcock, *Using Social Capital*, *op cit.*