Introduction

Identifying ways to link *exclusive* forms of indigenous social capital to more *inclusive* forms of social capital that integrate families, communities and nations into a global economy is a core problem of our age. At one level, this can be seen as a need to find ways to connect traditional forms of *bonding* social capital to new forms of *bridging* social capital. At a deeper level, this problem is a major challenge to the viability of liberal democratic political institutions, both nationally and inter-nationally.

The purpose of this paper is to propose a general strategy for finding ways to facilitate the development of linkages between the two types of social capital just noted. After a discussion of the significance of these social capital development problems for the future of liberal democratic institutions, we will outline a strategy that draws upon three basic elements. The first is the counter-intuitive notion that understanding the problem of building new forms of bridging social capital must start with the economist's assumption of the rational person who must receive *individual* incentives to be induced to support collective action, be it bonding or bridging social
capital. Mancur Olson's theory of collective action will be used to identify the limits within which the structural properties of bridging networks must conform. In turn, the identification of these universal parameters will provide guidance in the search for new forms of bridging social capital.

The second element in our approach, which is drawn, by and large, from sociological research is the notion that although bridging social capital must be expansive, it can take a variety of qualitatively different forms with respect to "weakness" or "strength" of ties. This assertion, it will be argued, removes the limitations of assertions about path dependency, instead opening up opportunities to identify "path alternatives."

The third element in our approach emphasizes the importance of public policy decision-making in influencing the advantages or disadvantages of indigenous social capital. In this regard, public policy decision-making with respect to social capital formation may be viewed as analogous to public policy decision-making with respect to the market. That is, participants in both the marketplace and social capital formation have primary responsibilities for their level of activity (or inactivity), but governments do have an important role in both instances in dealing with unfair competitive situations. This view emphasizes the importance of viewing political struggles, in part at least, as conflicts over competing institutional and organizational arrangements that favor one type of indigenous social capital over another.

The last section of the paper will examine the role of survey research in identifying public policy strategies for utilizing indigenous social capital to link traditional communities to the global economy. Examples from the Russian Village surveys of household adaptations to post-Soviet reforms and a social network analysis of the role of Tribal Colleges and Universities
in the development of social capital on Indian Reservations in the United States will be used as illustrations.

**Indigenous Social Capital and Threats to Liberal Democratic Institutions**

A pervasive theme in challenges to the legitimacy of liberal democratic institutions, whether national or inter-national in scope, is the notion that the system that is supposed to ensure equality of opportunity is somehow "rigged," in that some group or groups have an *unfair* competitive advantage over other groups. The Great Depression in the United States during the 1930s helped to facilitate such a crisis of legitimacy as soaring rates of poverty and unemployment highlighted the flaws in existing institutional arrangements in the marketplace. The Supreme Court's rejection of "closed shop" collective bargaining, for example, reinforced a competitive disadvantage of unorganized labor vis-à-vis organized giant corporations. The resolution to this crisis of legitimacy in the New Deal was the development of new institutional arrangements, such as the National Labor Relations Board that guaranteed workers the right to vote to unionize and, in turn, for the first time created effective countervailing power for them in collective bargaining. In the early part of the twentieth century a variety of major institutional adjustments through government intervention in the marketplace also occurred in Western European nations, most of them involving greater structural changes than what occurred in the United States.

During the post World War II period, considerable attention was given to unfair competition that was the result of differential human capital assets, especially education, in more versus less affluent families. This, in turn, prompted significant efforts to address these inequities through increased public assistance to higher as well as lower education.
The crises to legitimacy just described have not, of course, been entirely resolved. This is evidenced by the ongoing struggles over the fairness of international institutional arrangements, such as the World Bank, the IMF and the WTO, that regulate global marketplaces. Nonetheless, in the scholarly and public policy communities there is at least recognition that legitimacy issues exist with respect to questions of fairness regarding the influence of different institutional arrangements for regulating the use and development of physical and human capital. In turn, this recognition makes possible a debate about public policy alternatives that might affect the perceived legitimacy of specific institutional arrangements.

The relationship between social capital and the legitimacy of liberal democratic institutions, however, is not clearly understood. There is a growing literature showing a positive correlation between the presence of more extensive bridging social capital, trust, civil society and economic development. At the same time, however, much less attention has been given to the much more difficult question, how can bridging social capital be created or strengthened where it either does not exist or it is not very effective? The lack of attention to this issue leads either to a disdain for indigenous social capital that is not associated with bridging social capital and/or to a "one size fits all" view of the world.

The view that some types of indigenous social capital simply are incompatible with the development of an advanced economy is articulated in Edward Banfield's classic work, The Moral Basis of a Backward Society. He argues that the "amoral familism" of the southern Italian peasant reinforces a strong distrust of strangers, thus hindering economic development by blocking the establishment of bridging ties that would reduce transaction costs in business and reduce corruption. The "one size fits all" view that there is essentially only one path to the development of bridging ties is best articulated in Thomas Friedman's popular work, The Lexus
and the Olive Tree. The "golden straightjacket" and the "electronic herd," he argues, is forcing nations to choose between adopting relatively open and bridging forms of social organization that link them to the global economy or retaining more exclusive forms of social organization that will ensure that they remain economically less developed.[6]

The writers just mentioned have identified some basic truths about the negative consequences of not possessing effective bridging ties. At the same time, however, their analyses fail to adequately deal with the negative outcomes that result from trying to force communities and nations to simply abandon their traditional indigenous forms of bonding social capital and adopt a "one size fits all" form of bridging social capital. The first and most dramatic outcome is that groups under such pressure will react with a vengeance, as in the case of the very effective attacks on the World Trade Center and the Pentagon. Ironically, globalization of travel and communications permits effective coordination between those opposed to globalization and increasingly suggests that such reactionary movements cannot simply be eliminated by overwhelming force. This also helps to explain the tremendous growth of fundamentalist movements in various parts of the world that challenge the very essence of globalization, even in the face of extremely powerful corporate and governmental (national and inter-national) efforts to stop them.[10]

There is however, a more serious long-term negative societal and international outcome that can result from trying to force traditional communities and nations to give up their indigenous social capital in order to gain bridging social capital. A tragic illustration of this is found in the attempt to integrate Native American children into mainstream European-American culture and social organization by placing them in boarding schools where they were forced to abandon all use of their traditional language, religion and dress. The result was an extraordinary
upsurge in child suicides, breakdown of family authority and, in the long-run, the costs of welfare dependency, alcoholism and child neglect that has been borne by American taxpayers as well as, of course, Native Americans themselves. Native Americans describe this experience not only as psychologically devastating but spiritually catastrophic in that it severely weakened the social and cultural ties that gave persons their sense of identity and relatedness to the universe as-a-whole. In short, this experience highlights the long-term personal and social disorganization that can result from not recognizing how the societal benefits of indigenous bonding social capital may be lost through clumsy efforts to quickly create bonding social capital.

Thus, the question remains, are there any viable alternatives that would produce effective bridging social capital while, at the same time, maintaining some integrity to indigenous bonding social capital? Two classic treatises in sociology and economics, respectively, suggest some direction in finding an answer to this question. Emile Durkheim, in The Division of Labor in Society, proposes new institutional and organizational arrangements to create more effective linkages between traditional forms of community bonding and the centrifugal force of emerging industrial capitalism. Joseph Schumpeter's historical analysis of the success of Western liberal democracies in adapting to market failures and workers' challenges to inequality highlights the importance of pragmatic responses that essentially spliced together disparate elements that resulted in novel forms of welfare state intervention in the marketplace. These "non-heroic" responses, he argues, produced the enormous economic growth and rise in standard of living in Western Europe and North America in the 20th century.

Following Durkheim's and Schumpeter's logic, we would argue that the problems that result from the disconnection between highly exclusive indigenous bonding social capital and bridging social capital call for a "non-heroic" incremental development of new institutional
arrangements. The first step, in our view, is to recognize the legitimacy of indigenous social capital arrangements. The second step is to recognize that individuals who are bound to traditional forms of highly exclusive bonding social capital are rational actors and thus efforts to induce them to participate in new types of bridging social networks will require the development of new incentive structures.

Incentives & the Structural Properties of Bridging Social Capital

One of the most serious obstacles to understanding the intricacies of social capital formation is the inclination to treat something that is social as inherently juxtaposed to that which is individualistic or utilitarian. This view can lead to the assumption that developing bridging social capital requires a complete cultural overhaul and tends to neglect the more practical problems of identifying incentives with which to induce persons to participate in more expansive bridging networks. This is especially true when certain types of social relationships within which individuals are embedded appear to produce behaviors that are harmful, both in terms of their personal lives and society-as-a-whole.

Thus, for example, in economically developing countries the apparent reluctance of the poor to invest in ventures that would seem to offer them greater returns and move them out of poverty, is oftentimes misdiagnosed as a "culture of poverty" problem. Hernando De Soto's empirical research shows that the low risk behavior of the poor more typically is the result of institutional constraints, especially the lack of secure property rights, that forces them to invest all of their energies on trusted highly dense social networks. Similarly, the Russian peasant household's rejection of the post-Soviet reformers' (most of whom never left Moscow) proposals for expansion of their operations was not due to lack of information or an inherent rural
conservatism. Rather, villagers perceived (as did Western business interests) that property and credit institutions in the early post-Soviet period were quite fragile. In this environment, the most reasonable decision was to invest energy in building up highly dense and trusted personal helping networks. The net result of this strategy, however, was to retard the development of institutional arrangements that would have helped the growth of peasant household farms.16

One of the most important contributions of the New Institutionalism in Economics and Sociology, is that it retains the assumption of an individual's rationality but views the rational economic person as operating within institutional constraints that limit his or her choices. Thus, individuals may make perfectly rational choices to survive within a given institutional arrangement, even though in the aggregate these choices may be quite harmful and limit community or national economic development. Scholars in this tradition recognize the reinforcing relationship between institutions and the reward structure of social organizations (from family to national organizations) that spring from those institutions.17 This in turn creates a certain type of inertia that may result in a "path dependency"18 in which unintended downstream consequences may emerge from institutional and social organizational developments made at a much earlier period. In the next section, we will cite some serious limitations of the path dependency concept. Nonetheless, the contribution of this concept is that it directs our attention to the enormous constraints that make it difficult for individuals to change course and participate in new types of bridging social networks, even when they will bring will benefits to them.

In addition to the restraining effects of institutional and social organizational elements that fall under the rubric of path dependency, an inherent obstacle to developing bridging ties is that by definition such ties are more expansive and therefore typically involve more individuals
than bonding ties. Thus, the problem of building bridging ties involves difficulties inherent in collective action in any large group situation. These difficulties, as well as their solution are defined in Mancur Olson's description of the public goods problem.

In the *Logic of Collective Action*, Olson points out that there is fundamental difference in the way in which collective action is obtained in large versus small groups. In a small group, which is the locus of most bonding social capital, contributions to collective action is achieved through inter-personal rewards and punishments. In large groups, the locus of bridging social capital, the enforcement of individual contributions to collective efforts is more difficult. This is a result of two conditions found in large groups that are not found in small groups; the large size of the group limits the effectiveness of inter-personal rewards and punishments and a single individual's contributions to group efforts is much less significant. Both of these points mean that, *ceteris paribus*, the single individual is less motivated to contribute to collective action in the large group than in the small one. In short, large groups face a "free rider problem."

The definition of the public goods problem helps us to identify the universal challenge faced by all groups if they seek to develop bridging social capital. *Size alone suggests that creating bridging social capital should be more difficult than creating bonding social capital.*

Olson's solutions to the public goods problem in large groups helps us identify the limiting parameters that groups face when they attempt to find solutions to the public goods dilemma. He points out that there are three basic solutions to the public goods problem in large group situations: (1) a coercive mechanism; (2) selective incentives; and (3) a federal group strategy. Each of these solutions offers different *paths* with which to develop bridging social capital ties.
An illustration of the successful use of a coercive strategy for solving a public goods problem in the United States is the organization of workers in the mass production industries in the 1930s. Prior to the passage of the Wagner Act in 1935 and the Supreme Court’s ruling affirming its constitutionality, attempts to organize mass production workers, by and large, had failed. Union organizers constantly were thwarted, on the one hand, by the free rider problem (i.e., workers could benefit from collective organization whether or not they contributed to the union) and, on the other hand, from tightly organized employer groups. The Wagner Act permitted workers to coerce themselves into paying dues to a union if the majority of members in a shop voted for union recognition. This "closed shop" provision eliminated the free rider problem. In addition, the Wagner Act further strengthened the countervailing power of the unions vis-à-vis management by creating a new institutional mechanism, the National Labor Relations Board, which ensured that voting would operate without management’s interference.

In terms of bridging social capital, it would appear that coercive strategies are most likely to be successful when the "latent group" to be organized consists of an aggregate of individuals whose main connection to one another is their economic interest. In some situations, individuals may be unlikely to build bridges to one another and the outside world, in this case management, unless there is some type of formal institutional enforcement mechanism in place. A typical misdiagnosis of this type of situation is that individuals are not organizing collectively because of some cultural elements that make them apathetic or alienated. A more parsimonious explanation, however, may be that their failure to build bridging ties to one another is due to the absence of formal institutional mechanisms that would ensure that beneficiaries of public goods, such as better security and services, make some type of individual contribution to collective
efforts. This was the case, for example, with unsuccessful efforts to organize poor neighborhoods in American cities during the 1960s.

The second strategy for solving the public goods problem is to create individual selective incentives that will induce individuals to contribute to a collective good as a by-product of their contributions. Although the collective good, is a non-divisible public good that will benefit everyone, its costs are borne by individual contributors because they receive some individual benefit. The only way they can receive this selective benefit, however, is if they pay dues or in some other way contribute to the costs of collective action. An example of this type of strategy is the professional association that creates selective incentives for individuals to pay dues to become members, but as a by-product their dues pay for the costs of non-divisible collective goods, such as lobbying on behalf of the profession.

If we recognize that individuals are induced to participate in a wide variety of social groups by a wide variety of incentives, both material and non-material, then the selective incentive strategy is perhaps the most pervasive and effective solution to the public goods problem. The logic of this strategy helps us understand why some groups are more successful than others in linking indigenous bonding social capital to bridging social capital that can secure resources for public goods. An empirical study conducted in the United States in the 1960s, for example, attributed the phenomenal growth of "conservative" Protestant denominations to their effective use of highly personalized incentives to potential members, including social incentives related to fellowship and belonging, as well as individualized spiritual incentives. This attention to selective incentives induced persons to join these churches and then to contribute significant amounts of personal income to collective efforts that the churches defined as public goods.
Thus, their personal "tithing," which was induced by the selective benefits they received, paid for the costs of non-divisible collective goods as a by-product of their membership. The value of selective incentives and thus the likelihood of the success of the by-product strategy for solving the public goods problem and building bridging ties in a group is dependent, however, on the extent to which competitors can offer the material or non-material goods upon which they are built. Thus, for example, immigrant ethnic groups in the United States had a much easier time organizing collectively than do contemporary groups in urban slums because political entrepreneurs today face more intense competition from government and other service providers than did their counterparts in the earlier period. Similarly, Islamic fundamentalist organizations in the Middle East and elsewhere have been most successful in attracting new members when they have little competition in offering meager medical and social services as selective benefits because they have virtually no competition from other sources. The matter of how political conflict affects the shape of institutional arrangements that determine the value of one group versus another's selective incentives and, in turn, its capacity to build bridging social capital will be dealt with in the final section of this paper.

The final strategy for solving the public goods problem is a "federal group." While large groups cannot induce individuals to make contributions to non-divisible collective goods, a large group that is a federation of small groups can use the rewards and punishments operative in the latter to maintain individual contributions to the larger group effort. Olson notes that,

... organizations that use selected social incentives to mobilize a latent group interested in a collective good must be federations of smaller groups. The more important point,
however, is that social incentives are important mainly only in the small group, and play a role in the large group only when the large group is a federation of smaller groups.27

The federal group strategy is especially relevant to our concern with identifying ways of building bridging social capital when a group's dominant social capital is a highly exclusive bonding type. Examples of its successful development can be found in the development of highly successful ethnic enterprises in which the basic moral economy of the household,28 a type of bonding social capital, is linked to other households through quasi-kin connections that create bridging bonds of trust. This is found, for example, in the rotating credit associations that provided the capital for the development of small business enterprises in a variety of ethnic communities.29 Japanese immigrants in California used a federal strategy, based on quasi-kin relations to develop an integrated system of production, storage and marketing in the Central Valley.30

Path Alternatives to Building Bridging Social Ties

Mark Granovetter's often cited article, "The Strength of Weak Ties,"31 argues that less intense (i.e., "weak") relationships with others is a source of strength because they provide access to new information or other kinds of resources that are unavailable to those who are locked into highly dense self-contained networks. One of the central findings of the research reported in the article was that highly familistic, strong bonding tie groups, like the Italian Villagers in the North End of Boston were politically ineffective because they lacked weak bridging ties with which to form coalitions among themselves.
The research reported by Granovetter's provides some powerful insights into the limitations of isolated and restricted highly dense networks. Nonetheless, it would be misleading to assume that the solution to all bridging problems is to create weak ties. James Coleman, for example, notes that the diamond trade was monopolized for many years by a Jewish sect that used its strong tie linkages, based on kinship, ethnicity and religion, to build bridges between merchants on several continents. The example illustrates that the essential characteristic of bridging social capital is not its weakness or strength but rather its *extensiveness and inclusiveness*. Similarly, Ronald Dore's study shows how the Japanese gained control of the textile market through strong quasi-kin ties, based on a Japanese interpretation of Confucian social relationships (the *iemoto*). These relationships created long-term stable relationships between suppliers, producers and sellers that provided a competitive advantage vis-à-vis firms in other countries.

Both of the examples just cited are illustrations of the federal group solution that is outlined in Olson's treatment of the public goods problem in large groups. It will be recalled that this strategy employs strong bonding ties in small groups and links these groups to a larger federated collective good.

The assumption that a variety of strategies may work to achieve the same objective of building bridging social capital, from weak ties to quasi-kin networks, allows a greater number of choices on ways to link the unique properties of a group's bonding social capital with it's bridging social capital. An illustration of how different paths may achieve the same objective is found in a study of the social networks of rural leaders in the American Midwest.

One of the authors of this paper, along with a number of other colleagues, designed a study in the early 1990s to identify why, in the face of similar economic constraints, some small
rural communities seemed to do much better than others. The first step in this process was to create an index of viability, on which towns with populations between 1,000 and 2,500 were ranked. The index contained quantitative indicators of downtown tax receipts, presence of selected retail businesses and medical services in the downtown area, as well as several demographic change estimates.

Five communities were selected for in-depth study, two of which ranked high on the viability index and three of which ranked low on that index. The research question addressed in the study was, can high versus low viability be explained by the social network characteristics of the community leaders. For this purpose, a combination of a positional and reputational approaches were used to identify the fifteen top leaders in each of these communities.

While bridging networks to outside resources accounted for some of the differences between the more and less viable places, the most striking difference was in the structural properties of network relations between leaders within their respective communities. In the two high viability places, leaders reported that, on average, they worked with slightly more than 11 of the 14 other leaders identified. By contrast, leaders in the less viable places mentioned that, on average, they had only worked with slightly less than 8 of the other leaders on their list.

Yet, the paths through which the leaders developed bridging ties within the two viable communities were quite different from one another. In the German Catholic community the mean number of other leaders with whom each leader had an informal relationship (i.e., socialized informally, ate breakfast on a regular basis or shared a meal in one another's home) was almost 10 out of 14. Alternatively, in the other high viability place, with a Scotch-Irish, English and Protestant tradition, on average leaders had informal ties to less that 6 of the 14 other leaders. In the latter community, in which leaders had a much higher educational background
(80% of them were college graduates compared to 40% in the other viable community), leaders were connected to one another through formal voluntary associations and community development boards. Finally, it should be noted that the same levels of community viability as well as the differences in paths toward bridging social capital ties between leaders were found in a follow up study six years later.36

In short, the rural community viability study illustrates that it is possible to create bridging ties in different ways and that a "one size fits all" model is neither necessary nor desirable. The most difficult issue, and the one most neglected in discussions of social capital, however, is the role of power and governmental public policy decisions on the development of institutional arrangements that will provide advantages to the indigenous social capital of one group versus another.

**Power, Public Policy and Institutional Arrangements for Building Bridging Social Capital**

In an earlier section, we argued that the difficulties a group faces in developing bridging social capital is analogous to the problem of competition in the marketplace. These problems, of course, are oftentimes due, to a greater or lesser extent, to difficulties inherent in a group's cultural traditions that have created an institutional environment that creates a barrier to the development of bridging ties. At the same time, however, the failure of a group to compete in the social capital marketplace may be due, in part at least, to institutional arrangements that substantially weaken what otherwise could be a competitive advantage of that group's indigenous social capital. A classic example of this is the impact of the municipal reform movement on the value of indigenous ethnic immigrant social capital.
In the early part of the 20th century, the reform movement in American municipal government ostensibly offered a series of "reforms" that was supposed to reduce corruption in government, replacing "political machines" and patronage appointments with civil service exams and a more efficient form of government. Instead of directly elected mayors, the reformers promoted the notion of a non-elected "city manager" who was supposed to be above politics and to run the city's services like a business. The main thrust of the reform movement was to eliminate ward-based elections of city council representatives, replacing them with at-large elections. At-large elections were supposed to eliminate the incentive for council members to appeal to narrow neighborhood or ward-interests of a particular ethnic group and instead to represent the city-as-a-whole.

The ideology of reform was packaged in terms like public interest and reducing corruption and waste in government. Yet, it is clear that its main impact was to weaken the social capital of immigrant ethnic groups, especially those from Ireland, Eastern and Southern Europe by eliminating the selective incentives offered by ethnic ward politicians. One of the main motivators for the reform movement was to counter the success of immigrant ethnic political entrepreneurs in using the social incentives of "friendship," inclusion," and social support, along with modest material incentives associated with patronage. The machine politicians had built federated groups that drew upon the bonding social capital of ethnic family, kin and friendship networks. These bridging ties, created by the ward-based municipal political system, permitted ethnic immigrants to achieve a significant influence in American urban and national life, the latter occurring through the federated relationship between big city political machines and the national Democratic Party. Where the reform movement was successful, its
elimination of patronage and ward-based politics also eliminated the source of selective incentives that the immigrant political entrepreneurs had used to create bridging ties. 38

On a broader level, the political struggle over institutional arrangements that will favor the social capital of one group vis-à-vis another is very much connected to what appears to be purely marketplace institutional issues. Joseph Stiglitz's critique of the IMF and World Bank policies (especially the former) toward emerging economies contains considerable anecdotal information on the insensitivity of the Western-trained economists about ways that their policy recommendations would impact on the social fabric of the countries they were supposedly trying to help. "Shock therapy" policies that were supposed to generate open markets, for example, often reduced the competitiveness of a social capital relationship, grounded on kinship and village, that provided the social basis for traditional economic organization in many of these countries. Moreover, using the rationale of "opening up markets" to eliminate controls on criminal elements, the IMF planners often provided a fertile ground for Mafia gangs that had considerable social capital advantages over ordinary citizens. 39

Survey Research & Building Indigenous Social Capital

In this section we will examine the role of survey research in identifying ways to more effectively utilize indigenous social capital in linking traditional communities to the global economy. Examples from the Russian Village surveys of household adaptations to post-Soviet reforms and a social network analysis of the role of Tribal Colleges and Universities in the development of social capital on Indian Reservations in the United States will be used as illustrations.
The impact of Russian central government reform policies on rural villages shows both the resilience of indigenous social capital and the ways in which social policies can limit its development. At one level, there is compelling evidence that rural Russian households utilized their personal helping networks in a very effective manner in order to survive the economic dislocations of post-Soviet economic reforms. From 1991 to 1999, for example, the relative proportion of agricultural output contributed by the large enterprises, the former state supported collective and state farms, and household plots almost reversed each other. In 1991 large enterprises made up 69 percent of production and households made up 31 percent. In 1999, however, these large farms only contributed 38 percent of Russian agricultural production while households contributed 60 percent. Officially registered private farms, the reformer's hope for creating western style agriculture, only contributed a maximum of 3 percent in 1995, dropping to 2 percent in 1999.

Overall, rural households became much more self-sufficient during the post-Soviet period. In 1989, for example, households gained slightly less than one-quarter of their income through their own enterprises, largely through non-monetary consumption of food they produced. By 1999, however, households were obtaining, on average, almost two-thirds of their incomes by their own enterprises, including both household production and newer small businesses, such as repair services, that were not available to them in the earlier period. These gains were achieved by increased use of household labor and by the further development of informal helping networks.

The dramatic "shock therapy" character of the reforms, however, also generated some significant costs to bridging social capital in the Russian village. This is shown in Figure 1.
Figure 1 shows the results of resident participation in village festivals over a four-year period. The survey data from which the figure is constructed is based on three panel surveys of the same household members over time. Given the level of energy that households were putting into utilization of household labor and building personal helping networks to assist with plot production, it is perhaps not surprising that attendance at village festivals dropped from over 60 percent in 1995 to 40 percent in 1999.

The costs of this reduction in involvement in broader village-level activities, which is an indicator of lost social capital, is shown in Figure 2. This figure shows residents' satisfaction with their income versus the village (on a scale from 1 to 7) in the period from 1995 to 1999. At the beginning of the panel study satisfaction with the village was substantially higher than satisfaction with household income. During the four-year period, households were able to use their social capital, in the form of personal helping networks, to increase their income, but, at the same time, as they also decreased their involvement in village social activities, their satisfaction with the village declined markedly.
These findings reaffirm our earlier concerns about the effects of national or international policies that produce large changes in economic relationships without giving proper attention to the costs of these changes on extant social capital arrangements. In the case just cited, reform policies encouraged strengthening of some types of indigenous social capital, personal helping networks, but actually weakened bridging social capital, village involvement. As Stiglitz points out, when economic policies summarily weaken existing social institutions the net result is to increase popular resistance to broader structural changes in economic institutions. Thus, ironically, reform policies may in fact increase resistance to reform.

Our final example of the use of survey field research to understand ways to enhance indigenous social capital comes from an on-going study of ways in which Tribal Colleges and Universities can help bridge the gap between the world of Native Americans and the global economy. A persistent problem facing Native Americans has been what appears to be an unfair choice between retaining traditional culture and social organization versus participation in the larger American society and the global economy. The costs of either choice are quite high. If Native Americans reject mainstream culture and social organization to a great extent they run the risk of remaining isolated from the material, including health and education, benefits of the larger society. On the other hand, too much assimilation into the mainstream society may mean
a loss of one's identity. As noted earlier, this dilemma can have disastrous personal, communal and larger societal consequences.

The Tribal Colleges, which are funded in part by the tribes themselves and the federal government, can be viewed as a unique organizational structure that attempts to bridge the institutional worlds of mainstream society and Native American nations. The Tribal Colleges face a struggle of trying to retain the strong bonding social capital of the tribe but, at the same time, try to help students and community members develop bridging social capital to connect with opportunities in the larger American society and the global economy.

In order to meet the goal of strengthening bonding ties in the Native American community the Tribal College must remain accessible to Native American community members. This means being open to requests from the community for various kinds of services associated with community social service needs and cultural retention. At the same time, however, in the process of becoming accessible to the Native American community, the Tribal College may not have the resources left to develop bridging ties to the funding and job opportunity sources in the larger American society.

One of the goals of our project is to empirically identify which "mixes" of resource allocation in the Tribal Colleges will produce the optimal strengthening of indigenous bonding social capital, bridging ties within the Native American community and bridging ties to the larger American society. A technique of social network analysis is being used to identify these different mixes.

The social network methodology is based on asking personnel in the Tribal Colleges and persons identified as leaders in the Native American community to name individuals in the college and the community with whom they work on projects that affect either the college or the
community. Figures 3 and 4 provide a preliminary look at the impact of the different ways in which individual colleges attempt to deal with this resource allocation problem.

Figure 3 shows that there is a strong negative linear relationship between the "exclusivity" of network relationships between the Tribal College and the Native American community and the level of satisfaction of Native American respondents with their college. The more "exclusive" are the network relationships, the less satisfied are persons with the college. Less exclusivity would seem, therefore, to promote bonding social capital in the Native American community.

Figure 4, however, shows that degree of exclusivity in network relationships has a different type of association with the other goal of the Tribal College, which is to gain resources so that students and the Native American community as-a-whole can more effectively connect with the larger American society. This calls for bridging ties and is indicated in Figure 4 by the degree to which a college's sources of revenue are diverse, meaning the extent to which the college can link with different resource bases in the larger community. Here the relationship is curvilinear. The college that was least exclusive also has the least diverse revenue base, suggesting that all of the energy put into building bonding social capital in the Native American community may limit its ability to facilitate the development of bridging ties to the larger mainstream community. A certain level of exclusivity in network ties appears to be helpful in producing a coordinated effort, as indicated by the more diverse revenue sources associated with the schools that have the middle-level of exclusivity in their networks. After a certain level, however, more exclusivity begins to have a negative impact on the ability of the college to develop bridging ties.
Figure 3. Network Exclusivity & Community Level of Satisfaction in Four Tribal Colleges


\[ y = -87.111x + 90.289 \]
\[ R^2 = 0.9556 \]
Figure 4. Network Exclusivity & Revenue Diversity in Four Tribal Colleges


\[
y = -26.111x^2 + 25.652x - 5.9437 \\
R^2 = 0.9739
\]
Conclusion

Although the concept of social capital has been at the core of social science theory and research for several decades, we remain quite limited in our understanding of how to develop this commodity when it is either absent or not very effective. The problem of finding ways to build bridging social capital in group situations dominated by highly dense networks and very restrictive bonding social capital is especially challenging because the negative externalities resulting from those situations threaten the very core of liberal democratic institutions.

There are two main pitfalls that arise in dealing with indigenous social capital. The first is simply to dismiss indigenous social capital as backward and non-adaptive if it is not linked to some type of bridging social capital. This is the "one size fits all" approach and, not surprisingly, it evokes strong reactions from members of groups that possess this type of social capital. The second pitfall, which is as equally destructive as the first, is to proclaim the moral superiority of a highly exclusive indigenous social capital and to use that judgment as an excuse for its failure to build bridging ties. This alternative consigns individuals, communities and nations to isolation and dominance by more powerful groups.

We have tried to offer a third alternative that does not make any assumptions of moral superiority or inferiority of a given type of indigenous social capital. Nevertheless, we assume that whatever the character of its indigenous social capital, a group must still participate in a global economy and this requires building bridging social capital ties. The real challenge is to identify a strategy for building bridging social capital that is consistent with the bonding ties it already possesses. Building bridging social capital is essentially a type of collective action or public good problem and thus the first step is to understand what are the universal problems facing any aggregate of persons seeking a common goal. We have argued that Mancur Olson's
The Logic of Collective Action identifies these universal problems in small and large groups, as well as specific solutions to these problems.

The second step in finding ways to build bridging social capital is to recognize that there are many paths that will fit into one of the three strategies for solving the public goods problem, coercion, selective incentives and federated groups. How a particular group’s culture, history and current social organization fits into one of these solutions is, as we have argued, an empirical question that can best be addressed by asking questions of group members with sample surveys.

Endnotes

13 Schumpeter, Capitalism, Socialism and Democracy.
19 Olson, *The Logic of Collective Action*.
20 Ibid., pp. 66-97.
25 Barber, *Jihad versus McWorld*.
27 Ibid., p. 63.
32 James Coleman, "Social Capital in the Creation of Human Capital."
41 Narodnoye Khoziastvo SSSR v 1989 (Moscow: Goskomstat, 1990), 89.
44 Ibid., pp. 61-78.