ECONOMICS OF RURAL AREAS:
RURAL CAPITAL, CAPITAL IMMOBILITY,
AND PATH DEPENDENCE

Emory N. Castle, Professor
University Graduate Faculty of Economics
Oregon State University and

Ronald Oakerson, Professor
Political Science
Houghton College

These remarks are in the nature of a sequel to an earlier paper with discussions presented at the winter meetings of the American Economic Association and the American Agricultural Economics Association held in Chicago, January 1998. (Castle; also see discussions by Oakerson, Kraybill, Salamon, and Summers and Brown). In that paper it was concluded that rural capital stock is an important concept in rural decision making and in defining the field of rural studies. This conclusion is based on the actual proposition that rural people, under our system of government, have been accorded a degree of autonomy in the management of their affairs. This, in turn, rests on the normative judgment that some degree of autonomy is desirable. In that paper, four forms of capital—natural, man-made, human and social—were assumed to constitute the total stock of rural capital. The paper defined each component, and special attention was given to social capital.

How is this autonomy, of whatever magnitude, to be exercised? What will be its concerns? We believe that the management of the total stock of rural capital is of fundamental importance in this respect. It is this stock that will place a limit on what can be accomplished in the present, and its management in the present will affect the future. Thus, in a very fundamental way, those group decisions accorded to rural people will be concerned with the creation, management, and maintenance of various forms of rural capital.

Clearly, both public and private rights are held in varying proportions in the various capital forms, yet all privately held capital exists in an institutional context reflecting public or group considerations. It is those group decisions which affect the rural capital stock in some way that constitutes the essence of rural studies.

Group decision making
and the rural capital stock

Rural capital stock is of immense public importance both in rural areas and for the nation as a whole. It can be conceived as comprising some of the major elements of what is called res publica, the Latin root of republic, referring to the "public good" or "common wealth" of a community. In the founding generation of Americans, res publica was an important concept, one that supplied the good sought by the applied science of government and politics. Empirically, one can think of res publica as comprising the full set of things shared in common—the "commons" writ large. This set is much larger than usually imagined, including not only Samuelsonian or Musgravian pur
public goods, but also common-pool and flow or fugitive resources such as water and wildlife, land (i.e., the availability of land as a resource over time), public facilities such as roads, the technology that supplies the various forms of man-made capital, relationships of trust and reciprocity among community members (social capital), and facilities for the intergenerational transmission of knowledge—schools, libraries, and churches—that underlie the formation of human capital and, to a considerable extent, social capital as well.

Rural capital management and governance, therefore, is intimately tied up with public decision-making. Two basic types of decisions are important: investment and maintenance. It is important to distinguish the two, even though they cannot always be separated or ought always to be separated organizationally. Investment problems are well known; they involve making a large initial outlay in order to reap a flow of benefits over time. Periodic reinvestment is required. Maintenance problems are different: maintenance requires a series of small inputs over time, each one of which makes a negligible contribution to the capital stock, but that cumulatively extend its life, often greatly.

Each component of rural capital stock presents a somewhat different problem of decision-making, with various public-policy implications. Man-made capital in the form of technology, as we all know, requires maintenance. Natural capital presents mainly a maintenance problem—careful use—except for major replenishment projects, such as restoring the population of wolves. Human capital is both an investment and a maintenance problem, but public attention is usually focused on investment aspects. Once established, social capital is mainly a maintenance problem, a matter of reciprocating; but efforts to establish social capital where little exists may require large initial investments of time and effort and depend on public policy (Gurwitt).

The decision-making puzzle is how to recognize (1) when collective decisions are necessary or appropriate (as opposed to decisions by individuals, firms, or households) and (2) on what scale collective decisions should be made. Each component of rural capital requires a somewhat different mix of public and private decision-making. Investments in technology frequently require, or at least benefit from, collective action, while the maintenance of farm equipment, for example, is best left to individual farms. The scale on which collective action should occur is also a question of substantial importance. At issue in both questions are the incentives created to manage the capital stock appropriately.

Aristotle remarked, "that which is common to the greatest number has the least care bestowed upon it" (emphasis added). Aristotle states his observation as a paradox: those things with the greatest number of hands to care for them paradoxically receive the least care. Much of 20th century social science has been preoccupied in effect with explaining Aristotle's paradox in terms of the incentives involved in collective action. Aristotle's generalization (which undoubtedly has exceptions) carries with it two important implications:

- Responsibility for the full set of things shared in common should be divided, as far as is feasible, into small community packages. The nature of things, of course, imposes limits on how far this can be done, implying multiple, overlapping jurisdictions.
Institutional arrangements for the governance of the full set of things shared in common should be constituted so as to compensate for Aristotle's observation. This implies that small-scale, local governments should be designed quite differently from government on a larger scale, so as to take full advantage of the greater capacity bestowed by small communities.

If we add to Aristotle's observation the fact of diversity, that the rural capital stock is not homogeneous but exhibits great variety from place to place, this puts an additional premium on the importance of local collective action able to account for the diverse character of things shared in common.

Capabilities for local collective action that make use of third-party enforcement of obligations do not just happen; they are institutionally created in the context of the general political system. A major theme of a political science of rural areas should be concerned with the opportunities available for local collective action to address diverse problems of investment and maintenance regarding the four components of rural capital stock. The relevant types and forms of collective action exhibit a considerable range. Included are ground-water management districts; drainage districts; irrigation districts; watershed management institutions; school districts; library districts; road maintenance districts; soil conservation districts; wildlife habitat management regimes; state forests; and so forth. Governmental arrangements are usually complemented by voluntary associations that in the aggregate make up the rural civil society.

To the extent that rural America is different from metropolitan America, "ruralness" should be taken into account when dividing responsibility for res publica. To the extent that rural America exhibits diversity from one rural place to another, diverse rural areas need multiple opportunities for local collective action—a one-size-fits-all national rural policy won't do. This begins to make a strong case for rural local autonomy. However, we need to understand that the purpose of autonomy, in Aristotle's terms, is responsibility—care of the commons. The formation of a local government (or local arrangement for collective action) indicates a willingness to take responsibility for the local commons.

Frequently—and more than likely, increasingly—multiple, overlapping communities have somewhat different interests in the same commons—especially with respect to the natural-capital component of the rural capital stock. If local interest is entirely compatible with the interests of others, responsibility can be safely assigned locally. Rural communities become stewards of the nation's natural resources. Others outside the immediate community can enhance local care of the commons by buying into the local endeavor through intergovernmental grants—especially for supporting investment aspects. When local interests and the interests of others conflict, some sort of bargain or accommodation has to be reached that allows both sets of interests to be satisfied to some degree. Rural people should not be required to enter into such discussions from a disadvantaged position, though they are almost always outnumbered in state legislatures and the Congress, where the necessary bargains usually get worked out. The political bargain can, however, take the form of an institutional arrangement that allows various interests to be represented in a continuing process of governing and managing a common-pool resource or facility. Multi-organizational or inter-
agency arrangements for managing resources can bring a variety of interests to bear on collective decisions.

Finally, we need to remember that the human capability to care for the public is cultural—that is, it builds on the efforts of previous generations and thus depends on intergenerational transmission. The ideas and system of ideas on which efforts of human coordination depend are of special relevance here. Social capital, in particular, depends on norms of reciprocity that cannot be reinvented from scratch with each new generation. In this sense, rural studies is itself a cultural project, an effort to build knowledge that can be transmitted from one generation to the next, and thus contribute over the long term to the viability of rural societies.

Capital immobility and path dependence

Practical people concerned about the welfare of rural places are well aware that past investment decisions affect current choices. There are numerous accounts of firms engaging in economic activity in rural areas, and thereby affecting the rural capital stock in a significant way. A new economic activity may attract additional workers to an area. This may require investment in the infrastructure of the community in the forms of roads, schools, and health services. Private sector investment also increases capital both directly within the new industry, as well as indirectly in related economic activities. The natural environment may also be changed, sometimes through disinvestment rather than investment. In addition, group processes may be affected as they respond to different needs and opportunities within the community.

Conditions may change so that a rural area that once was attractive may no longer be so. The firm may leave and the economic activity it was engaged in may cease, but many of the investments may remain, with the result that the rural place is different than it was before the firm located there originally. The investments and disinvestments made by the firm will define a different set of opportunities than would exist had the farm not located there in the first place. In such a circumstance the past investment has placed the rural area on a different trajectory or path than it would have been on otherwise. This path dependence has been the concern of many writers on rural development topics.

Path dependence stemming from immobile capital provides a justification for including rural capital as an important part of rural studies. The rural capital concept provides a framework for judging the long-term consequences of different investments. Will the resulting trajectories be degenerative or progressive? Economists have powerful tools to bring to bear on such questions if they are applied in realistic institutional settings.

The rural capital concept directs attention to the relationship among the various forms of capital. Coleman noted that social capital usually arises as a by-product of particular endeavors or activities. As a result, it probably will be more productive in terms of its original purpose or mission in the presence of original endeavors or activities than it will be in their absence. Nevertheless, social capital arises because of mutual trust and an expectation of reciprocity, and these attributes may come to have value independent of the activities or endeavors which gave rise to them in the first place. Traditional industries may be favored even though they would no longer be chosen if starting from scratch; a premium is placed on related activities and
endeavors consistent with existing forms of social capital. In other words, different economic endeavors will have varying degrees of compatibility with existing forms of social capital. Such circumstances have clear implications with respect to path dependence and capital immobility.

Recent developments near Garden City, Kansas can illustrate these considerations. Location there of the value added activities of cattle feeding, slaughtering, and meat packing has resulted in many non-traditional economic activities. People with different ethnic origins moved into the area. It soon became apparent, at least to some community leaders, that the traditional social capital forms were not adapted to the new economic order. These people set out to create different forms of social capital in the community and especially in the schools. Presumably they worked to establish a certain level of mutual trust among the newcomers as well as between the newcomers and the old-timers. (The newcomers were not of a single ethnic origin.) Explicit attention was directed to modifying traditional forms of social capital to make them consistent with the new economic endeavors. These new social capital arrangements may well have shifted development trajectories.

The conditions in Garden City, Kansas provide an example of the identification and subsequent removal of a limiting factor in economic development, specifically a particular form of social capital. Yet all of the consequences of such a development cannot be known at present. The successful launching of a new form of economic activity will necessarily require additional investment in all of the major capital forms. The natural environment will be modified, additional forms of man-made capital will come into existence, the human capital mix will change and, as noted, different social capital forms will be created. The community needs to be concerned as to the nature of the new trajectory that will be created.

The value-added activities that have been created there are clearly dependent on livestock production in that region and economic conditions may not always favor livestock production. If there should be a decline, the Garden City area will be faced with decisions as to how best to use the new forms of capital which have been created. Economic principles can guide such decisions. So long as the productivity of an asset exceeds its salvage value, it will be economic to employ it in some way. There are, of course, complications in practice in following such a principle, especially for human and social capital.

When different ethnic groups come into an area for a significant period of time some typically remain, even though the attraction which brought them there in the first place no longer exists. Whether they can become integrated into the economic and social fabric of the community will depend on both economic opportunity and social integration.

If economic opportunity can be created, they may be able to remain in the area on a progressive social trajectory provided some degree of social integration has occurred. If economic opportunity in the area does not exist, or cannot be created, out migration may be required. If this is necessary, human capital investments that improve adaptability in other circumstances may yield great dividends.

The advantage of the total rural capital concept is that it requires that future consequences be considered. It encourages consideration of the type of trajectory that will result from particular economic development activities. It
asks whether resulting trajectories are likely to be progressive or degenerative for rural places.

References


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