Articles

Federated Structures for Cooperative Growth

James M. Carman

A comparative institutional economics approach is used to investigate the question of whether the governance structure of cooperatives is flawed in ways that would make it an inefficient or ineffective organization form for the political-social-economic environment at this turn to the new century. Cooperatives in four settings around the globe were studied intensively. The findings suggest that, while greater use of federated cooperatives and co-op-IOF hybrid models is required, the cooperative may be an ideal economic organization form to deal with the complexities of a global society in the century ahead.

As evidenced by the rapid changes in Eastern Europe beginning in 1989, the political economic institutions of our society are phenomena that are not well understood—or, at least, well practiced. In response to this lack of understanding, a set of paradigms referred to here as "comparative institutional economics" have been championed by, among others, Oliver Williamson (1985). This new institutional economics is concerned with how a society structures economic organizations that are transaction efficient and effective.

It explicitly recognizes that one function of an economic organization is the *coordination* of activities within the organization and between the organization and its regular vertical contractor organizations. At the top of the organization a set of functions that are concerned with broad policy, strategy, and the relationship to stakeholders are performed. We call these high level, coordinating functions, "governance."

The cooperative society[1] is one kind of economic organization. It differs from the normal investor-owned firm (IOF) in that its owners represent stakeholders beyond those that provide equity capital to the organization.[2] The diversity of cooperative societies arises more because of the different types of stakeholders who may be the members (for example, suppliers, customers, workers) than because of the types of services provided.

Regardless of the nature of the stakes members have in the society, governance is almost guaranteed to offer unique challenges and involve different structures than in an IOF. One reason governance issues are different is that the objective function (mutual benefit to members) extends beyond simply profit maximization or maximization of return on the investment of the stakeholder. These objectives are almost always economic and social, and often political in nature as well.

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However, the modern corporation is also interested in the social well-being of its workers and regularly engages in the political activities of its community.

The critical difference between the IOF and the cooperative society in their historical, pure forms lies in the social significance of their ownership, and hence governance structure. It is this governance structure difference that is a central focus of this article. The fundamental question investigated here is whether the cooperative society may have in its governance structure some fundamental flaws that make it an undesirable form of economic organization.

The thesis developed is that the unique role of the cooperative, as an almost hybrid form of social institution, is as relevant today as it was in the nineteenth century. This belief stems from two grounds:

1. The collapsing, large communist countries around the globe are seeking ways to transform to market economies while honoring the rights, property, and sacrifices of their citizens. The argument presented here is that the cooperative is exactly the kind of organizational form required for a successful transition in these countries.
2. Strategic alliances are a relevant, modern phenomenon—responding to rapid technological and environmental changes, enterprises are seeking ways to improve their flexibility. Rather than going to the extreme of market coordination, they are partnering to form loosely coupled organizations of various forms that are usually grouped under the heading of strategic alliances. When there are more than two or three organizations involved, the cooperative governance model may be ideal for such strategic alliances.

   The cooperative has clear principles for democratic decision making and distribution of returns. Yet, the cooperative has not been a popular form of strategic alliance. To be sure cooperatives should be recommended for governance of strategic alliances, it is important to know the strengths and weaknesses of the cooperative form.

Note that in both the communist country transition and strategic alliance examples, one criterion for organizational effectiveness is the ability of the governance form to be an engine of change. Can the cooperative form be such an engine? When cooperative failures have been analyzed, the inability to deal with change is more often than not the cause of failure. Are there other weaknesses in the cooperative form that make it unpopular or unsuitable for the twenty-first century?

Method

Stated in null form, the general hypothesis is that cooperative organizations can be just as efficient and effective as IOFs. There are a few aspects of this approach that need to be stated at the outset.

First, the investigation was limited to cooperative societies that added value through their marketing activities. Many also engaged in supply (purchasing) and additional processing activities. Excluded from the study are: service cooperatives, consumer cooperatives, credit unions, insurance cooperatives, and worker cooperatives.

Second, the literature on cooperatives appears to direct attention to particular characteristics of the cooperative structure that are likely to create contracting and efficiency governance problems. Third, the new institutional economics is comparative in its research design—in this study the general benchmark against which cooperatives were compared was the IOF. Comparisons of cooperative efficiency and effectiveness were made in four studies in four quite different settings: dairy cooperatives in Ireland, grain marketing cooperatives in the United Kingdom, rural hospital cooperatives in the United States, and a wholesale cooperative in Hungary. Standing alone, each is one or more case studies, but taken together they comprise a research design that is more like a quasi-experiment conducted in a natural, as contrasted with a laboratory, environment.

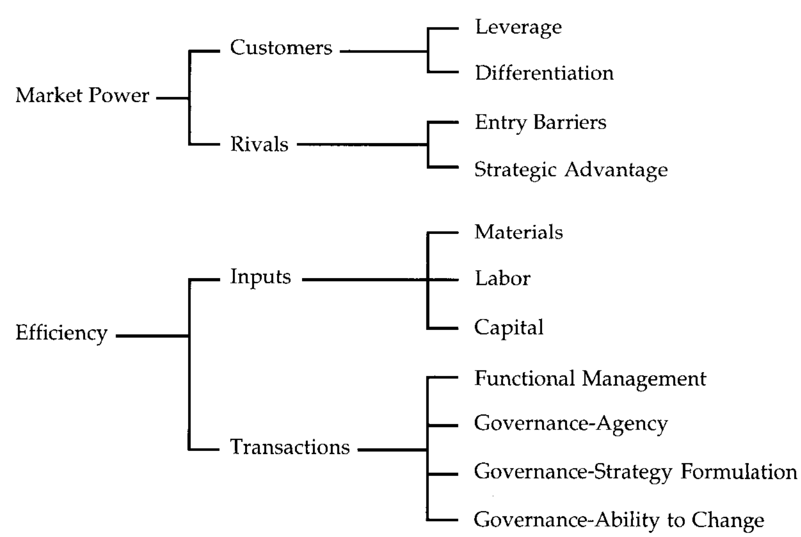
The logical proposition is that, in each of the four settings, the socioeconomic environment, political environment, and historical role of cooperatives in that setting influence the competitive position of the cooperatives under study, and the competitive position of the cooperative influences its behavior and performance. These are the "within setting analyses." Then "between analysis" can be made by comparing the behavior and performance of the cooperatives across settings. In this paper, the "between analysis" is the focus.

The next section of the paper presents a brief summary of the theory, generally well-known, which formed the background for this study. Next follows brief descriptions of the four settings. Then the findings for the "between setting analysis" are presented. This is followed by sections on the Holding Co-op-IOF hybrid design and some final conclusions.

Theory

Following in the Coase (1937) tradition, we begin with the notion that economic organizations come about because sometimes there are advantages to performing some functions within an organization rather than by the use of markets. What are these advantages? Figure 1 is offered as a vehicle for answering this question.[3]

FIGURE 1. Potential Advantages of Internalization Over Markets



The figure includes, as strategic advantages in the market power branch, any economies of scale and scope, i.e., resource endowment. One strategic competitive advantage of interest in this study of cooperatives is the ability to take advantage of vertical integration in ways that rivals cannot. Downstream processing adds value and profit from the performance of those downstream functions and assures the continuity of markets for products of the original, upstream operations.[4] There remain for the efficiency branch major limbs for efficient prices, use of inputs, and transaction efficiency, i.e., resource use and coordination. The three inputs of materials, labor, and capital stem from one branch, and transaction costs stem from the other.

The efficiencies of internalization, as contrasted with markets, potentially could accrue from the prices paid for inputs as well as from their efficient use. Note that the ends of these branches represent all of the major stakeholders of a firm: suppliers, workers, lenders, managers, and owners. What we seek is an organizational form that will appropriately assign risk and returns to the property rights of these stakeholders (Coase 1960). Sometimes this can be better accomplished through internalization, sometimes through markets, sometimes through hybrid alliances.

The comparative institutional approach observes that all three organization forms are, in fact, a series of contracts: employment contracts, sales or procurement contracts, or alliance governance contracts. Transaction cost analysis (Williamson 1975, 1985, and 1986) posits that the important economizing factors concern the efficiency and effectiveness of these contracts: making actors aware of the potential gains, preventing parties from bargaining to increase their shares of the gains of cooperation, and enforcing the agreed-upon terms of trade.[5] Organizing a transaction within a firm does not eliminate contracting costs, since by doing so, a contract for input is replaced by an employment contract.

Note that this comparative institutional approach takes the focus off the market power factors emphasized in the traditional IO perspective, and balances them with transaction efficiency. Economic rents can accrue to the owners of an organization not only from the market power of their resources but also from their skill in coordinating the use of these resources. Thus, the industrial organization economics approach is enriched by the comparative institutional approach that borrows from the business history approach of Chandler (1966) and North (1990), the organizational behavior approach of Pfeffer and Salancik (1977), and even some neglected economists (Florence 1933).

In the theory of cooperatives, it is easy to see that the Phillips (1953)–Helmberger and Hoos (1962) controversy is really on this same point, but simply dressed in more traditional microeconomic clothes. The cooperative is a hybrid organizational form that is a bundle of contracts designed to capture economic rents through both market power, resources employment, and efficient coordination of these resources. Schrader (1989) has summarized the structures of cooperative-IOF hybrids. Some of these have characteristics not unlike the organizational design that will be recommended later in this article.[6] The fragility of these contracts is the topic of much of the theoretic contributions to the cooperative literature including Pigou (1932), Zusman (1982), and Sexton, et al. (1989).

Indeed, Pigou raised most of the nagging problems surrounding cooperative contracting.[7] Although he found cooperatives similar to the corporate form on efficiency grounds in many respects, he believed them to be inferior in that they were likely to suffer from inadequate capital funding for risky ventures, underpaid (and hence inefficient) management, and inexpert directorate leadership. (These latter two factors lead to less efficient coordination than either the IOF model or market coordination [Dixon and Wilkinson 1986, 43-47].)

The present analysis expands on Pigou's third point. Poor coordination may take the form of *static* transaction efficiency (perhaps caused by the democratic structure of cooperative voting) or *dynamic* weaknesses that cause cooperatives to resist change. These dynamic weaknesses might be characterized by: opportunism because members and directors are also suppliers; short sightedness because of the inability to realize appreciation of share value; resistance to change because of members' committed production assets; or limited scope economies because of committed assets.

It has been suggested that these governance problems may be overcome if leaders can develop within the membership a common culture that unites individual objectives and development with organizational objectives and development. (See Collins and Porras [1994] for one evaluation of this proposition.) Certainly poverty and the desire for market power have been the ideological glue that have historically bound cooperatives. Pigou (1932) believed cooperatives would actually suffer less from opportunistic behavior than would private assemblers of agricultural products. If farmers valued the family farm as an important social institution, they would share the common objectives for their cooperative of building market power and economies of scale. Viewed in this way, one would hope that the communality of such objectives would increase, not hinder, the efficiency of coordination in the cooperative form. It is precisely this loyalty to the cause that helps members not to behave opportunistically. Many corporate executives would be delighted by a bit more long-run loyalty within the investor community.

Dnes and Foxall (1981) have developed a model of this phenomenon that leads to the conclusion that the larger the cooperative becomes, the more ideological glue, or governance monitoring, is required to reduce opportunism. Thus, one hypothesis investigated below is that opportunism increases with the number of members. Further, evidence is provided on whether federated or joint venture cooperatives can be effective in reducing the effects of size on opportunism.

It may well be that we will find no transaction costs of internal contracting within the cooperative that are necessarily higher than the internal contracting costs of the IOF. However, cooperatives might still be inferior in terms of dynamic performance and effectiveness.[8] Thus, in the four studies, it was necessary to look at effectiveness issues as well as efficiency issues.

Transition of the Irish Dairy Cooperatives

Space does not permit an adequate history of the Irish cooperative movement or of how the dairy cooperatives got themselves into the position they found themselves in 1986, at which time the analysis summarized here began. Many problems and mistakes had occurred during the previous century. Most relevant to the current period were:

1. there had never been patronage dividends in cash or shares;
2. members who left dairy farming were not required to sell their shares;
3. if shares had been redeemed, they could only be sold at par value regardless of how much they had appreciated.

In the last half of the 1980s the largest three cooperatives (and those with greatest market shares) moved away from the cooperative form and reorganized as IOFs, while some smaller cooperatives simply sold out to IOFs. Owners felt they were entitled to realize the appreciation of their shares. Certainly these large enterprises with foreign operations and markets felt the cooperative form had failed them (or at least their managements) in providing a strategy for survival in international food processing and marketing. Consequently, they converted to share corporations.

Another large cooperative conversion, Golden Vale, contains many of the features of the holding company-IOF design described later in this article. This design retains ultimate control of the company in the hands of the milk producers' cooperative while providing a source of equity capital for expansion and for protecting the property rights of owners.

Scale and scope clearly impact economic performance. If one tries to control for these factors and looks only at governance effectiveness and efficiency, in the few years since conversion, the converted cooperatives, the cooperatives sold to IOFs (combined 7 percent market share), and the hybrid Golden Vale are all doing equally well.

The Irish experience also may provide some lessons on cooperation among cooperatives. In studying this issue in European Union (EU) countries, Gordon Foxall (1981, 59) found that the most successful cooperatives are in countries where

> the activities of primary co-operatives are co-ordinated and integrated at secondary level on either a regional or commodity basis, sometimes both, in such a way as to reduce or obviate competition and duplication of effort. The essential feature of co-operative organisation in these countries is the power of secondary and more particularly, tertiary co-operatives to encourage, direct or force substantial structural reorganisation among their member co-operatives.

The star of the federated dairy cooperatives in Ireland is An Bord Bainne (Kerrygold brand) with a turnover that makes it, by far, the largest cooperative society in the country (in turnover, not value added) and a significant, but far from dominant, competitor in world markets. Its board of directors has voting rules in keeping with those suggested here. That is, voting shares and seats on the board of directors are allocated on the basis of patronage. In 1989, the two largest cooperatives, who now had global operations of their own and sold very little through An Bord Bainne, sued the bord claiming, among other things, that their rules would unfairly dilute the value of their original shareholdings. The court found, and on appeal the Supreme Court of Ireland affirmed, in favor of An Bord Bainne with regard to share valuation, bonus sharing, membership expulsion, and voting rights.[9]

While North American cooperatives have not experienced the long series of mistakes made by cooperatives in Ireland, there are some implications that can be drawn from the Irish cooperative experience. One is that if the assets of local cooperatives are heavily weighted by shares of a federated cooperative, it is more difficult for members to lust after the immediate liquidity resulting from the success of the federation. Another is that if the cooperative interest goes with the individual and not with the business, retiring members have a right to redeem their shares at a value reflecting asset value and going business value rather than stated share value. A third is that federated marketing cooperatives, marketing subsidiaries, or joint venture IOFs have advantages for global operations and for farmer members.

Cooperative Grain Marketing in the United Kingdom

Entry into the EU proved difficult for the grain producers in the United Kingdom as grain prices dropped with increasing international competition and the lifting of government protection. The cooperatives' market share of grain marketed was never great by European standards—reaching about 21 percent in the 1980s. Historically, farmers had stored grain on the farm and sold it through independent merchants. The cooperative sector had developed around the need for modern storage, so the independent merchants were viewed as both competitors and customers. The decline of prices and price supports and the increasing concentration of buyers during the 1980s gave rise to the exit of about 40 percent of the traders and merchants. Many farmers and a few cooperatives lost money when their traders were unable to pay for grain already delivered.

While competing against multinational traders and also losing some money on speculative trades, the cooperatives were able to survive. The surviving structure is one of integrated firms assembling, grading, storing, selling, and, in some cases, dockside loading. In other words, the survivors were those who had the scale to perform the physical handling functions.

The question at the time of the study was whether the cooperatives could organize themselves in a fashion to efficiently and effectively compete against the multinational giants. Consequently, much of the focus in this setting was the effectiveness of the governance structures of the cooperatives—specifically, four special-purpose grain cooperatives and the grain divisions of four multi-purpose cooperatives.

A multiple regression on management fees per tonne showed that management fees were greater in the multipurpose societies than in the special-purpose societies and that management fees correlated positively with the number of marketing and general managers employed. However, when these factors are controlled for, management fees per tonne correlated negatively with tonnage.[10] Some opportunities for scale economies do exist. Mean cooperative tonnage was about 115,000 tonnes in the sample. While the savings would not be linear, and staff size would rise with more volume, a tripling, say, of the volume traded should allow a significant reduction in management costs per tonne.

While the geographic size and dispersion of grain producing areas will make it difficult to achieve in some regions, a desirable structure is likely to be one in which a number of special-purpose storage cooperatives market together at least 250,000 tonnes through a single trading office. There would still be activities that even these large regional cooperatives may be too small to undertake. Thus, a tertiary, truly federal society may be able to play an important role. A voluntary organization of this type exists, and that federal organization has formed strategic alliances with an IOF for export sales and insurance services. However, the full potential of the federated organization has not as yet been developed.

The reason the multi-purpose societies are performing relatively poorly appears to stem from sources other than scale inefficiencies. The regression mentioned above (and in note 9) showed that the fees charged by the multis, allowing for differences in volume, were higher than those of the special-purpose societies.

The special-purpose societies were simply more transaction and governance efficient than the multi-purpose societies.

Rural Hospital Cooperatives in the United States

Health care reform in the United States has been extraordinarily difficult for the providers of health care in rural areas. There are: economic barriers to access, physical barriers to access, operating problems for small hospitals, the difficulties of rural medical practice, and shortages of health professionals. Managers of urban hospitals have not experienced these problems and generally have little sympathy for them. Yet, in order to be a part of the evolution to managed care, rural residents need to be included in managed care plans. Afraid of losing the access to primary, specialist, and emergency care they require, rural communities have generally been skeptical of turning over care provision to urban centers. Indeed, the track record of urban medical centers running rural hospitals has not been a good one.[11]

One solution to this problem is for a group of individual rural providers independently to form a strategic alliance with an urban partner (*the tied regional network*) or to form an alliance with other rural partners (*the cooperative).* Such alliances could contract collectively with employers and third party payers, who are still often the gatekeeper intermediaries between providers and ultimate consumers of health care services. The comparison in this study was between the two types of rural strategic alliances. Was there a difference between the two types in their efficiency and effectiveness in coordinating the delivery of health care to rural residents?

The analysis showed that the tied networks offered more services than did the cooperatives. This is because the tied networks can capture economies of scale through their networks that are not available to the other type of alliance. Tertiary hospitals (those having the skills to provide specialized, but low volume, procedures) have insufficient volume to capture many economies of scale. Thus, selling these specialized services to rural affiliates is a win-win situation. In addition, the tertiary hospital can afford to offer these services at very favorable rates because of the referral business generated from the rural community.

It was also possible to investigate whether governance within the tied networks is inferior or superior to that of the cooperatives. Some local communities were quite satisfied with the way their tied network urban hospital served their needs and honored their wishes. The concern about the tied networks is that they are biased toward being acute care and specialist oriented and may not always act in the best interests of the local community.

Regarding board performance and strategy formulation, one rural consortium proved to be a textbook model of effective governance. While there is no reason to think that there is a bottomless pool of leadership talent working in rural health care, the alliances in this sample were richly endowed. However, the important distinction between tied networks and cooperatives was that the tertiary hospitals viewed the local boards as their customers. That is a somewhat different perspective from that of the chief executive officer-dominated rural alliances that may view their local boards as community monitors. As a result, the nature of bottom-up involvement in the planning process was different, and sometimes superior, in the tied networks.

There was some frailty in the bridge between alliance strategic planning and the strategic planning of member hospitals. This frailty was opportunistic cherry-picking. Interestingly, unlike the situation in agriculture, a 100 percent participation requirement was not the answer. Hospitals buy and sell a larger variety of products and services than do farmers, and the range of marginal costs associated with these services is quite great. It is commonly the case that one member hospital can find a better deal on a particular product or service at some point in time. Thus, 100 percent participation in every program is an unreasonable requirement. Price matching by the cooperative or a minimum annual participation rate has proven to be a superior method to minimize cherry-picking.

Another way for regional cooperatives to offer programs at prices that could be advantageous for all members would be through the formation of a national federated cooperative. At the time of this study, an analysis of the extent of scale economies that might be captured by such an organization had not been undertaken.

Cooperatives in Transition Economies: Hungarian Wholesale Cooperatives

This study addressed the issue of whether the cooperative organizational form can play an effective role in the transition of the former communist economies. Specifically, the focus was on a comparison of wholesale cooperatives in Hungary with two privatized IOFs in that country. Note that, in all four settings, the industry being studied was under severe stress from dramatic environmental, specifically market organization, changes: the globalization of food marketing, complete reorganization of the health care delivery system, and transition to a market economy.

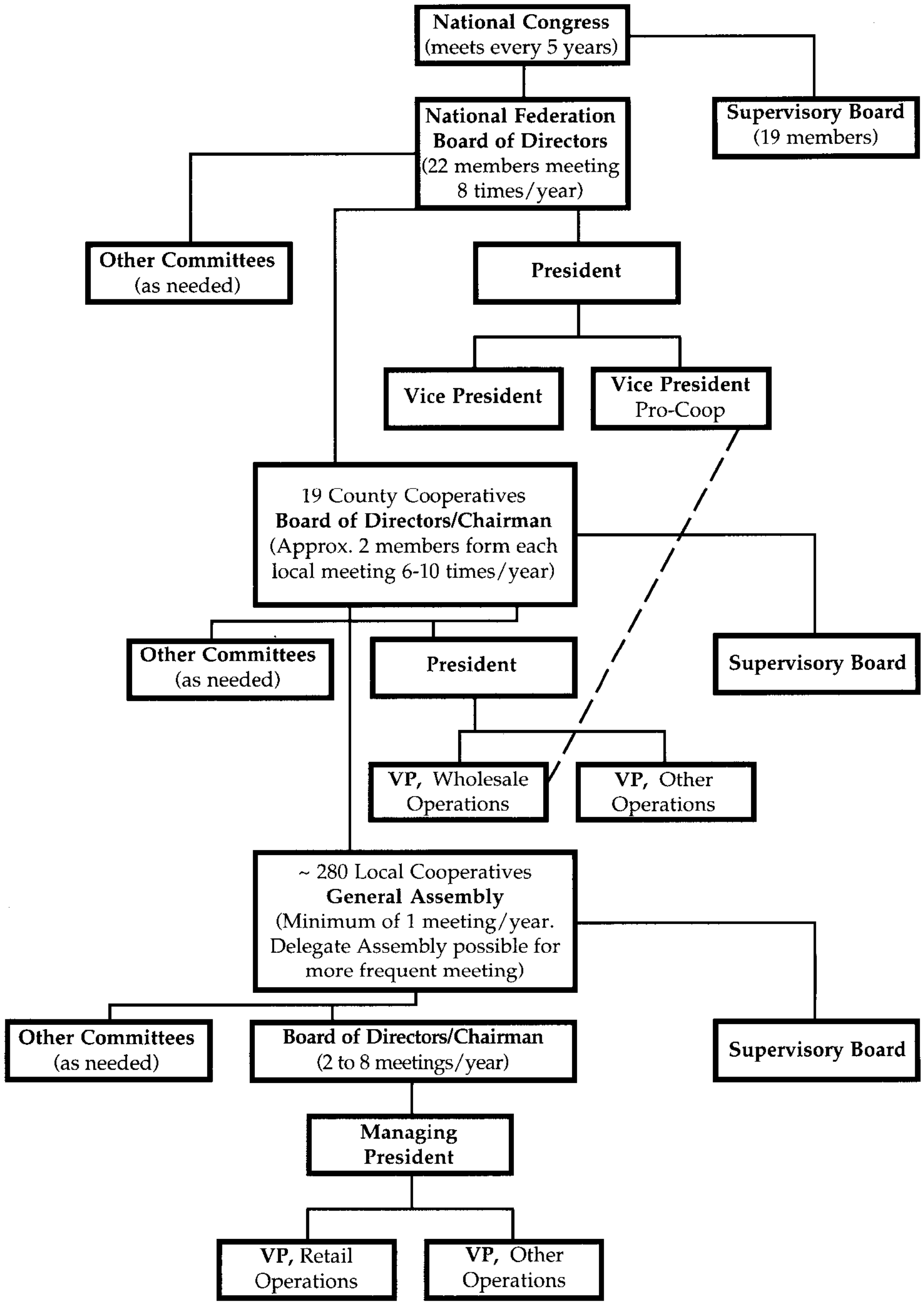
While governed by different privatization laws, all these organizations began their transformation in 1992 (Co-op Hungary 1994). The comparison firms were not privatized until 1994. The new cooperative organization structure is shown in figure 2. At the local cooperative level, the governance and management structure are not unlike those of cooperatives everywhere. The supervisory board acts as an audit committee with special powers. The board of directors might be characterized as "the president's board" while the supervisory board could be viewed as "the members' board."

The federated, second-level cooperatives are at the county level. It is important to recognize that the county cooperatives own and manage the wholesale operations. At the federal level, there are really no full-function, operating companies. The National Federation acts principally as a support and lobbying entity.

"Pro-Coop," a division of the National Federation, acts as buying agent for the thirteen wholesale companies. In late 1993, it had a professional staff of about four people. It controls and coordinates "vendor fairs" in each county, recommends model stock plans, conducts national joint promotions, and is developing a common identity program. Much needs to be done to increase transaction economies. The Pro-Coop vice president spends much of his time selling his ideas to county managers and boards. He has limited access to funds for new program development. The solution to these problems probably lies in a tighter alliance of the county wholesale cooperatives.

The comparison IOFs, both smaller than the cooperative distribution system, have made more progress. One, of smaller size and narrower line, has avoided the diseconomies of scale rather than enjoying economies of scale. A number of programs were developed that would probably only be possible in a small, opportunistic organization.

FIGURE 2. Local, Regional and National Organization of Hungarian Consumer Cooperatives



Regarding the skills of the present top managers, observations of performance over two years showed little difference among these three organizations. On the other hand, both comparison firms were quick to establish extensive incentive compensation and bonus programs in their organizations, and the management groups in both companies have additional incentives through appreciation of their share ownership positions.

During the period from 1992 to 1994, all three organizations had small, transition boards that acted chiefly as sounding boards for ideas coming from management. There were no board planning committees. Strategy formulation was concentrated with the chief executive officer (CEO) and the headquarters staff. In terms of knowing where it was going and knowing what had to be accomplished to get there, the three firms are quite comparable.

The lag at Pro-Coop is the result of its size and non-integrated governance structure. Democracy or committee structures are not the problems. The problem is that Pro-Coop lacks a proper institutional corpus; it is simply transaction inefficient in its decision making. Besides persuasion, it has no way of getting the county wholesale operations to follow its lead. This condition clearly would have slowed the two comparison firms. The recommended solution would be for Pro-Coop to become a true, federated cooperative (rather than a division of the national organization) and for the county societies to sell their wholesale operations to this federated cooperative.

Findings Across Settings

This comparison of findings in the four settings is organized around the concerns found in modern theory and in the literature dating back to Pigou in 1920.

Sources of Capital

While most of the cooperatives in this study have, or had in the past, suffered from the inability to tap equity markets, many have available to them financing methods for overcoming this problem. Some of these require establishing federated cooperatives or IOFs (discussed below); others do not. While over two-thirds of the marketing cooperatives in the United States expect members to provide capital in proportion to their use of cooperative services, the initial contributions were low in some settings in this study, and there was a reluctance to keep capital investments in line with usage.

Not all countries have a Bank for Cooperatives, a National Cooperative Bank, or a National Cooperative Bank Development Corporation to provide creative financing and technical support for start-up cooperative enterprises. Put more sharply, it appears that many cooperatives use less debt financing than would be reasonable given their value as going businesses. Of the cases reported here, only the Irish dairy cooperatives enjoyed economic performance that might have justified a valuation that would be a significant multiple of asset value.

Incentives for Management

Two concerns are at issue here. The first is the factual issue of whether cooperative managers are as efficient at coordination and functional management as are IOF managers. The second concern arises if the answer is no—we then need to determine why. Could it be that the incentives available to cooperative managers are not as effective as those available to managers of corporations with publicly traded shares? An alternative hypothesis advanced was that cooperative managers are limited by constraints on horizontal and vertical scope, preventing them from achieving an optimal size of operation.

Regarding the factual question, based on the observation of performance in these studies, we cannot reject the null hypothesis that the management skills of both groups are equivalent. In Ireland, Hungary, and certainly the United States, the management skills of cooperative managers were probably a bit greater than was true in the comparison organizations. In the United Kingdom, both proprietary and cooperative firms suffered from the problems of small size, and both had very spotty success records.

But despite the fact that the author observed no significant difference in management skills, there were concerns about management incentives and human resources development. One would expect that cooperatives would excel in continuing executive education. That was the case except in the United Kingdom. While statistical salary comparisons of base compensation were not done, there was some evidence that, except for in Ireland, cooperatives paid at the low end of the salary range. The real problem lies with incentive compensation. Cooperatives had ineffective programs in all four settings. They should make greater use of incentive bonus plans for managers.

Governance

The issue here is alleged inefficiency in bargaining and internal contracting that results from the concern for protection of property rights. In other words, are cooperatives so concerned about protecting property rights in their internal contracting that they are a noncompetitive organizational form?

Regarding communication costs, we were unable to obtain reliable statistics on "communication costs per member, per year," so managers were asked for their impressions of the costs of communication and consensus building. Such costs are probably greater for cooperatives than for privately held companies, but compared to limited partnerships in the United States, the costs were quite similar. For IOFs, U.S. Securities and Exchange Commission requirements, plus the litigious nature of shareholders, make regulatory costs less for cooperatives, even with the existence of other tax and regulatory agency requirements on cooperatives.

Consensus building is another matter. Concerns about not softening the ideological glue (discussed below) that would weaken the cooperatives over the longer term caused cooperative executives in most settings to strive for consensus through more direct and one-on-one communication than would be true in an IOF. In short, they took bargaining and internal contracting seriously.

The exception was in Ireland, where lack of attention to participation dated from 1920 and was the cause of many problems in the 1980s. Thus, these consensus building costs might be viewed as a short-term inefficiency but a long-term strength. The principal-agent governance relationship works more effectively when members feel they have participated and understand the views of other members, be they in the majority or the minority.

In Hungary, as required by federal law, and in the United Kingdom and the United States, as specified in organization by-laws, meetings of the membership were taken seriously and were well attended. In these cooperatives, the number of members were small enough to make "town meeting" formats effective. The problems that were found to exist concerned board size and composition or heterogeneity of members.

Opportunism

Opportunistic behavior was found in all settings. In Ireland, it had its roots in an uneducated and poor farm class led by managers with business acumen. Irish cooperatives were allowed to mature without the use of known, good cooperative governance practices. It is not surprising that the managers of the large, successful milk processing companies looked for ways to dump the cooperative organization model.

In the other three settings, a minority of members had some special circumstances, usually associated with being the largest producers, that caused them to act opportunistically and not in the long-term interests of the cooperative. In the United Kingdom it was the opportunity to sell one portion of one crop at a higher price; in Hungary it was the opportunity to buy one order at a lower price; and in the United States, it was the opportunity to obtain a service at a lower price than could be obtained through the cooperative. One solution to this problem of heterogeneous size that is suitable for some situations is to ask larger members to contribute capital in proportion to patronage and to have voting privileges that match their capital contributions. Such a rule may help minimize the subsidization of small members by large ones. Heterogeneity in the amount of specific assets committed is a characteristic of cooperative membership that needs to be carefully considered and anticipated in governance policies.

Other creative solutions were developed in connection with U.S. hospital cooperatives. When one or two members can purchase outside at a lower price, they would buy through the cooperative, and the cooperative would subsidize their price disadvantage. A similar situation arises when the cooperative offers a new program and some members do not want to participate. When only a minority of members wants to participate, they could be told to organize the program on their own and pay the cooperative a finder's fee for having initially discovered the program.

One function of governance is to resolve conflicts that are legitimate and not unreasonably opportunistic. In other words, the democratic, consensus building nature of cooperative governance represents a good that improves internal contracting and protects property rights. It is a practice that should not be thrown out in the name of short-term efficiency—even if such short-run gains in efficiency could be demonstrated.

Engines of Change

Does the combination of specific assets, information impactedness, and opportunism fostered by directors being suppliers cause cooperatives to be more resistant to change than share corporations? The answer to this question was a clear "yes" in all four settings. Members generally seemed fixed in their ways and jealously guarded their autonomy. It was not possible to parcel out whether this was due to some personal characteristics, opportunism, or specific assets. It was probably not due to information impactedness or asymmetry.

What can be done to reduce the risk of asset specificity so members are more willing to make investments in change? Theory suggests greater internalization would reduce the risk of asset specificity and cause cooperative board members to be less resistant to change. Thus, both vertical and horizontal integration may help ease the risks associated with asset specificity in growing dynamic markets, but not necessarily in mature markets with saturated supply.

Note that the problem is not with the cooperative; it is a member problem. Owners will seek to protect the income-generating capability of their specific assets in any way possible. So, what have owners done? They have banded together into a cooperative society to do joint marketing. The cooperative is the result, not the cause.

Now, if banding together can help, then, in some cases, further banding together and vertical integration may help even more. Consequently, our analysis in all settings kept returning to two themes. One is continued emphasis on commitment to the commonweal. "The desire for local autonomy needs to be made to work for the cooperative through the promotion of collaborative solutions that enhance self-interest" (Size 1991). This is the strength of banding together. The second is horizontal and vertical integration made possible through the formation of federated cooperatives. These two strategies will increase the willingness to change and should permit cooperative organizations to be dynamically as aggressive as IOFs.

Ideological Glue

It will be helpful to recast an argument made just above. Stakeholders have and actually create property rights in ways other than possession of a legal deed or title. That is why they are stakeholders. Workers do not hold a legal deed to their jobs, but over time they commit specific assets to that job and thus have property rights. The same can often be said about suppliers, customers, lenders, and the community. Indeed, equity investors may be the stakeholders with the clearest property rights but the least specific asset property rights. English common law did not anticipate this problem. That is why franchise law had to be created almost from ground zero in recent decades in the United States. The conflicts in franchising result because the assets of the two parties are intertwined and mutually dependent, but the objective functions of the two parties are not necessarily congruent.

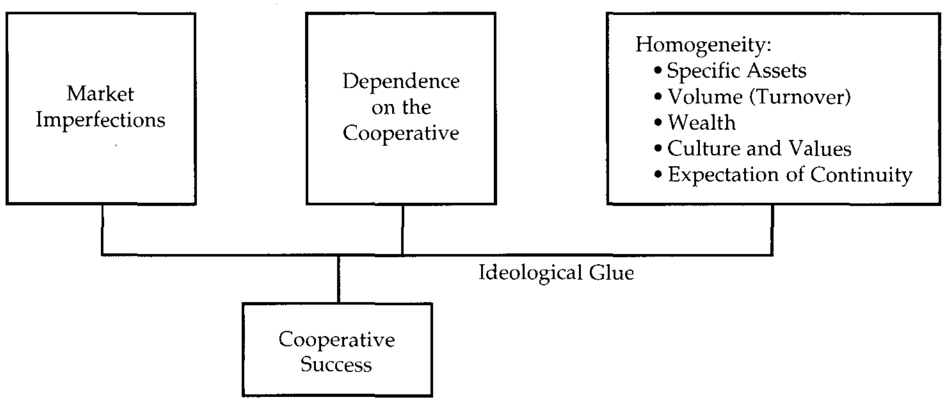
The same thing exists for a group of suppliers who band together to form a cooperative to do joint marketing. The assets of the members and the cooperative become intertwined; the managers of the cooperative have created property rights for themselves through their successful hard work; the members have to ensure that the objective functions of all members and the cooperative stay aligned. Thus, the author observed high governance costs when much effort had to be spent on consensus building. Further, the need for consensus building went up when members were of quite different sizes because larger members were likely subsidizing smaller members.

The fungibility of marketable securities avoids this whole problem. Instead it creates another problem of agency because the objectives of investors are likely to be far more short run than those of managers. Note that this same situation is created by strategic alliances. Two companies can have market relationships without getting their specific asset property rights intertwined. When they attempt to internalize some of these transactions through a strategic alliance, they immediately have to face the problem of compatibility of objectives, goals, values, styles, etc.

Members and managers in cooperative societies need to address the issue of compatibility of mission and the commonweal. How do they achieve and keep alignment in vision, values, mission, objectives, and goals? From the perspective of the professional cooperative executive, this is not an idle question. It does not arise through some defect in organizational form. It follows directly from the fact that owners are more than just equity investors. They are stakeholders of *more than one type*, for example, equity owner, supplier, lender. If there had not been some congruence of mission and objective function, they would not have joined in the first place. This was nowhere more evident than in the rural hospital setting where the tied networks could capture all the available economies of scale and spur creativity for scope expansion, but the cooperative was necessary in order to achieve the mission of preserving the quality of the rural health care delivery system. It is a strength that goes with the territory. Cooperative members don't need to worry about empowerment; they are already empowered.

But they do have to worry about resolving conflict. The long history of the cooperative movement suggests that the ideological glue required to resolve conflicts came from economic duress. Figure 3, captures this motive as "market imperfections." The alliance forms in order to acquire market power to overcome market imperfections. But market imperfections will not hold the alliance together.

FIGURE 3. Conditions for Cooperative Success



Another ingredient to the glue is the dependence of the member on the cooperative. Here it is the cooperative's specific assets that are important. A creamery, a cold storage unit, a slaughter house, and a captive market are specific assets that belong to the cooperative. Without them, the farmer member is unable to dispose of production. Thus, member loyalty will be positively correlated with dependence on the cooperative (Izraeli, Pizam, and Neumann 1976).

But neither market power or dependence are likely to make the glue stick. That requires homogeneity of other types.[12] Five are listed in the figure. In that list, similarity of culture and values is a proxy for *trust*. Without trust, cooperative alliances may be little more than reactions to threatening market conditions. It is only through trust that the costs of monitoring to control opportunistic behavior can be kept at manageable levels.[13]

Federated Cooperatives

In all the four studies, an issue shown to be vitally important if cooperatives are to play a role in "the global village" of the twenty-first century is the structure of federated cooperatives whose shares are owned by primary-level cooperative societies. Given the focus on homogeneity, local decision making, local adaptability, controlling the size of membership, the costs of consensus building, and the costs of monitoring, it is not surprising that this topic has not received the attention it deserves. Federated cooperatives create a hierarchy; they centralize some decision making; they increase size. How can they possibly be desirable?

The answer lies simply in the complexity of our modern society—the global village. If the cooperative is to be a useful organization form for enterprise, it must be able to compete on an international basis. The task is to capture the advantages of the local flexibility and property rights protection of the primary cooperative society with the scale and geographic reach made possible through a second-tier cooperative. Boswell (1990) speaks of "conformable size" to convey the idea that absolute size is not as important as is a size that fits the proportions and demands of the environment. Here we are saying that the organization can be *structured* in a way that makes organizational units most efficient and effective in their own particular environments. Hence, the primary cooperative serves a district; a federated cooperative serves a region or a nation.

It is important to see that the phenomenon is not simply a matter of governance costs growing disproportionately as the primary cooperative grows in size. It is a matter of the structural *design* needing to change as it becomes larger and captures more economies of scale and scope. The task is to make each decision at the optimum place, have efficient internal contracts, protect property rights, do so without creating excessive bureaucracy, and be competitively effective in the marketplace. Indeed, this is a version of the classic, corporate, centralization-decentralization design problem with more serious property rights considerations. In all four settings, restructuring with federated cooperatives was recommended as a way to capture needed economies of scale. The locus of decision making in that structure does not centralize decision making. It actually pushes decisions that should be made at the local level down to that level.

In Ireland and Hungary, what amounts to two variations on the same holding company-IOF model design were suggested. In the United Kingdom, the cooperatives had a demonstrated need for a federated cooperative but had not taken full advantage of such an organization; in the United States, the potential for capturing scale economies had not been explored. If formed, it was clear that, in all four settings, such federated cooperatives would quickly form strategic alliances with IOFs or form subsidiary IOFs.

The Holding Company-IOF Design

Because local conditions vary, this description of the hybrid design does not reflect all the elements necessary to transform the existing organizations in each country. What follows is a more generic model that can be adapted to fit most environments.

The first step should be the establishment of a federal cooperative ("Holding Co-op"). Shares of Holding Co-op, and thereby election of its board, could be owned by either local cooperatives or individual members, depending on the local situation. Both the chief executive and a member (to better represent member interests) of each local cooperative should participate on the board of Holding Co-op. In addition, a few outside directors should be added to that board in order to add perspective, add expertise, and reduce micromanagement.

Now in many situations, the result would be a board that is too big. One might quickly get to a board size of over fifty people. The solution to this problem can take many forms: if the setting is one where supervisory boards are required, some members can be on the supervisory board; or some local cooperative representatives could serve on the IOF boards; the two members from each local cooperative might have voice but only one vote; some members might serve on board committees, but not have voice or vote at board meetings; or some form of rotating, but carefully balanced, membership might be employed. The principal requirement is that owner-members of local cooperatives remain involved in governance at the federated level. If they do not, the ideological glue will soften, and it will be easy to slip into a "we versus them" relationship between the primary and secondary cooperatives.

The *reserved rights* of Holding Co-op are few but important. It would have to approve the purchase or sale of shares or assets of any of the subsidiary companies in which it held stock as well as of its own assets and shares. It would be concerned with strategy formulation and top governance issues. In addition, it would be the final arbiter of unresolved disputes among its subsidiaries regarding dividends, transfer prices (in Ireland, the transfer price of milk), and wage rates. It would be very difficult for the farmer suppliers to lose control of this organization. Holding Co-op shares could be re-sold only to the treasury. They would pay only a nominal dividend and then only after some years of building reserves. Its goal would be to retain earnings to provide capital for its "subsidiary IOF" enterprises.

"Subsidiary IOF" can sell shares privately to significant investors. (In both Ireland and Hungary, it is likely that more than one Subsidiary IOF would be established.) Holding Co-op could issue up to 50 percent of the shares in the IOF subsidiaries to outside investors (presumably foreign investors in the transition economies) interested in joint venturing in the enterprise. If an outside investor had the expertise, it might assume operating control of the enterprise.

This structure of equity rather than debt should protect the interest of outside investors. In the intermediate run, dividends from Subsidiary IOF to the parent could be as stock so that Holding Co-op could actually increase its share of ownership. In the longer run, Holding Co-op may choose to sell or dividend its shares in Subsidiary IOF to the local cooperative ("Old Co-op") where Subsidiary IOF has its operations. This cooperative, in turn, might sell the shares to local individuals or to its retirement funds. Certainly individual cooperative members must see the route by which they can receive excess profits in the intermediate run and appreciation gains in the long run.

Old Co-op would change very little from the existing local cooperative organizations. (In Hungary, Old Co-op would be the local or county societies.) The main activities would be milk collection, retailing, or other community related enterprises. The governance structure would include the existing democratic committee structure of the cooperative. Patronage would probably be paid in shares or warrants to buy shares in Subsidiary IOF.

Note the logic of this two-tier, holding-company governance structure. The farmer-supplier activities and governance could be kept as cooperative activities with the advantages of that governance structure. The processing and marketing governance and management need not have farmers involved. Their property rights in these operations stop at the cream separator, and only investors require special property rights protection.

If Holding Co-op's enterprises prosper, it could encourage the formation of other enterprises in the communities of local, member cooperatives. These enterprises would, in the developing world, probably be organized as cooperatives and could include needed additions to infrastructure and housing. That is, it would invest in only those things its board and the local board believed the community needed that were not being provided by private capital. Holding Co-op could be viewed as the entrepreneur of last resort for local community development. Notice that debt capital could also be raised for such enterprises with the debt being secured by the holdings in Subsidiary IOF.

This proposal is designed to provide needed outside equity capital to local communities while at the same time promoting local entrepreneurship. It does so by:

1. focusing first on the primary productive enterprises of the cooperative sector;
2. bringing in and protecting the property rights of outside capital;
3. encouraging development of private, entrepreneurial subsidiary and support industry;
4. using the cooperative model to transfer assets back to private hands;
5. protecting the property rights of the local people; and by
6. encouraging enterprise where private development is lacking.

When differences in wealth and individual preferences occur, the cooperative can step aside. If the ideological glue disappears, this proposal will accommodate transition to another organizational form. However, it is likely that, while sometimes used as a bridge organization, the cooperative model will remain an important form that protects the rights of all stakeholders and not just those of capital providers. It is a form designed to increase the rights of private property and not subvert them. Thus, we believe it is an appropriate and desirable model that is likely to become a permanent characteristic of transition economies.

In the privatization of Hungarian *state* firms, employee and community ownership were retained as a permanent feature. The employee retirement fund was given up to 50 percent of the shares, and the local community councils were given about 15 percent. The shares owned by the community councils play a role similar to the shares in Subsidiary IOF held by Holding Co-op. They can be used to obtain voice and vote on the boards of these companies, or they can be sold for other community investment, or they can be used as collateral for bank loans to finance other community investments. Again, while community shares might sometimes be used as transition vehicles to private ownership, community and employee ownership will remain important, long-term, distinguishing characteristics of European transition economies.

Conclusions

Kornai (1992, 91-105), in organizing his important book on the political economy of communism, speaks of five types of coordination mechanisms within a social system: bureaucratic, market, self-governing, ethical, and family. This list fits very well when considering the institutions we are beginning to respect as we enter the twenty-first century and when considering the cooperative as a coordinating organization within society.

It should be clear that it is assumed here that cooperatives must compete in markets and, therefore, must meet the disciplines provided by the markets. Further, the cooperative achieves market power and economies of scale and scope by internalizing some transactions and by using a democratic, self-governing mechanism for doing so. However, all cooperatives of any significant size must organize themselves with hired, expert operating managers and some degree of bureaucratic structure.

Members of cooperative societies require the ideological glue to practice cooperation and to avoid opportunistic behavior. This ideological glue often involves ethical principles that go beyond those of the society generally and that include the ethical principles of the International Cooperative Alliance, particular professions, and sometimes even particular communities, religious denominations, or political philosophies. Finally, this ideological glue is often related to specific assets that are sometimes family owned.

The cooperative organizational form, unlike any other significant structure of economic organization in the world today, relies on all five of Kornai's methods of economic coordination. While we have seen that this reliance on all five methods sometimes may make the form fragile, it also can be a source of strength for continued growth in an increasingly complex world. Indeed, we observe how fragile society is in all parts of the world. This fragility arises in ethnic, ethical, and family, as well as market, institutions. What may be required is to adapt the cooperative organization, which has historic roots in a much simpler agrarian or newly industrialized society, into one that operates comfortably in a complex, post-industrial, global society.

This study began with the hypothesis that the cooperative can be just as efficient and effective an organization form as the IOF. Based on this study, that hypothesis cannot be rejected. *The theoretical evidence suggests, and the empirical evidence presented here demonstrates, that the contracting within the cooperative organizational form is not inherently flawed. The problems encountered by the organizations studied here could have been overcome with knowledgeable leadership and current best practices.* We found no governance weaknesses in terms of principal-agent function or protection of property rights. The cooperative form does a superior job of balancing the rights of all stakeholders than does the IOF.

In the nineteenth and twentieth centuries, industrialization, a chronic shortage of capital, and a relative abundance of labor caused the IOF to become the dominant economic organization. Now we are finding flaws in the principal-agent relationships of that form. Perhaps even more serious, we have mounting evidence that the society may be too fragile for the global corporation to be the dominant economic organizational form, or for the nation state federation like the European Union to be the dominant political organizational form.

Even after capturing all available economies of scale in production or marketing, the stand-alone local cooperative is unlikely to be viable in national or international competition. Such enterprises will not be of great importance in the century ahead. This analysis suggests that the holding co-op structure with appropriate cooperative and IOF subsidiaries is efficient and effective for organizations with global operations or serving national or international markets. It appears to give the best balance of local control and global competitiveness. It is noteworthy that all four of the cooperative organizations in this study either have or will find IOF subsidiaries useful vehicles for growth. Others in the United States have championed the advantages of other forms of "new generation, IOF-like" hybrid cooperatives. It may be that, in contexts not covered in the setting described here, other hybrid structures may serve as well as the holding co-op model. Such an analysis must be left for future research. For example, the model best for capital-rich countries may not be the best model for most of the world where personal wealth is still in very short supply.

It would seem though that the world is returning to an appreciation of "associativeness in liberty" (Boswell 1990; Bellah 1985) as the philosophy that underlies the institutions necessary to keep our society safe. The organizations that implement such institutional values would be based on cooperative communities of various forms. The cooperative society, expanded by a multi-tiered structure, can be the best economic organizational form for implementing these institutional values.

Notes

1. While no longer commonly used in North American English, the term "society" is still used with regard to cooperative associations in the remainder of the English speaking world.

2. Because of differences in company law across various countries, "IOF" will be used throughout as a way to refer to *private or publicly traded, limited liability, joint stock companies* in the various countries discussed. The main reason for these references is that, with the exception of Denmark, all the countries discussed have separate legislation covering the registration and regulation of cooperative societies.

3. Oliver Williamson (1984) inspired this particular graphic representation as a result of one he uses in discussing corporate governance. However, this diagram has a different purpose from Williamson's.

4. I would prefer to use the term "market failure" to indicate a market that does not allocate resources in a satisfactory manner. This definition says nothing about the "transaction efficiency" with which the market performs this allocative function. However, in many intermediate markets, vertical integration may be entered into for a combination of allocative efficiency and transaction efficiency reasons. The figure suggests that the sole reason is market power and not transaction efficiency. That is not intended. Marketing cooperatives that enter into downstream processing for allocative efficiency reasons may then find they are more transaction inefficient than was the nonintegrated market.

5. One focus of Williamson's work is on the importance of specific assets. This is important in the context of agricultural product. A perishable crop is a specific asset. In addition, a farm committed to a particular crop and technology is very specific. Even if the farm is convertible to other forms of production, the land itself is not moveable and is constrained by soil and weather at its particular location. Thus, according to the theory, asset specificity is a motivation for farmers to cooperate in the formation of some kind of organization to internalize transactions that otherwise would be subject to market failures.

6. Land O'Lakes in the United States and CEBECO in the Netherlands are examples.

7. Pigou wrote his chapter on cooperatives for the first, 1920 edition, and his citations include many from the late nineteenth century. That chapter was not revised after 1924.

8. The problem here, like that of Lange (1938) regarding socialism, may be caused more by inappropriate incentives and poor implementation than of planning skill or inefficient internal contracting. Socialism suffers from the latter as well.

9. High Court Decision, 22 June 1990; Supreme Court Decision, 21 March 1991.

10. The best fit equation was:

$$\begin{array}{llll} \text{FEE} = 2.089 & - .000009\ \text{TONNE} & + .0639\ \#\text{MGTEMP} & + 1.253\ \text{MULTIPURPOSEDUMMY} \\ \text{Adj } R^2 = .76 & (.01) & (.09) & (.02) \end{array}$$

11. Washoe Medical Center (Nevada) and Methodist Hospitals of Memphis are examples of urban hospitals disaffiliating their rural hospital networks after about five years of trying. Somewhat more successful are proprietary companies such as Brim Associates

and Quorum Health Group that are in the business of managing under contract or owning rural hospitals. It may have been possible to make a performance comparison with the second of these two, but, at the time of this study, their internal organization problems were too turbulent to make a comparison meaningful. Subsequently, the performance of Quorum's owned hospitals has been no better than those in cooperatives or tied networks.

12. Boswell (1990, 81-83) offers a parallel but somewhat different list as the requirements for public cooperation.

13. We have not in this figure introduced size, i.e., the number of members. Dnes and Foxall (1981) pointed out that monitoring costs must go up with size of membership.

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