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# The Role of Cooperatives in Agriculture: Historic Remnant or Viable Membership Organization?

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Although cooperatives offer a viable organizational structure for many groups, economic theory suggests that the cooperative form of business should be preferred over a corporation only if special conditions are present. This paper identifies several conditions that may serve as justifications for cooperatives. Next, conditions limiting the performance of cooperatives are examined. Cooperative members are urged to examine their organization to discern whether its organizational structure provides the best vehicle for meeting group objectives.

Financial problems in the agricultural sector and pressures of the marketplace are challenging the viability and existence of some agricultural cooperative organizations. Concern about the performance of cooperatives raises the issue of the role of these organizations in agriculture. Are the structural characteristics of individual cooperative organizations amenable to current social and economic activities of agricultural producers, marketers, and consumers, or are they remnants of pluralistic historical processes consisting of philosophical and social qualities that transcend utilitarian concerns?

Several topics concerning the isolation of an optimal role of cooperatives in agriculture have been advanced in recent literature. Some especially insightful research has been conducted by an economist at Yale University on the role of nonprofit enterprises. Hansmann (1980) delineated a conceptual framework for nonprofit organizations, including cooperatives. He viewed the organizations as responses to a relatively well-defined set of social needs and described the needs in economic terms. Market failures were noted as constituting a major factor in the preference of individuals for nonprofit organizations over traditional business corporations. Hansmann followed this analysis with ideas for reforming nonprofit corporation law, including a recommendation for reform of cooperative-enabling legislation (1981). More recently, Hansmann noted product market failures as a major impetus for farmer ownership of cooperatives (1988).

Other literature concerning the role of cooperatives includes Christy's analysis of recent growth trends for cooperatives and his conclusion that their role has broader application than simply market failure considerations. Porter and Scully looked at transaction, decision, information, and contract-monitoring costs and reported that noncooperatives outperformed cooperatives with respect to technical efficiency.

This paper further examines the role of cooperatives in responding to current social and economic needs of cooperative members. After defining a cooperative, several major justifications for agricultural cooperatives are outlined. Next, limitations that may adversely affect the performance of cooperative organizations are examined. The analysis recommends that agricultural cooperatives, and cooperative members, take stock of their purpose, reevaluate their mission, and address or reassess their role to determine whether their organization constitutes the preferred business association for optimizing the needs of its clientele. Responses to such an inquiry will depend on the existence of other firms. Although most cooperatives already evaluate various options, this paper suggests that in the absence of sufficient justification for operation as a cooperative, restructuring of operations, divestment of selected business activities, merger, consolidation, or even abandonment of the firm may provide an improved vehicle for meeting group objectives.

## Defining a Cooperative

For the purposes of this paper, a cooperative is a nonprofit organization comprising persons with a common objective of collectively achieving a goal whereby each member has a voice in the selection of management and proportional participation in benefits accruing from the association's activities. Voice in the selection of management is provided by regulations whereby each member has only one vote or a vote based on his or her patronage of the cooperative. Proportional participation in benefits occurs by reason that cooperative earnings are either retained by the cooperative or returned to members based on their patronage. This definition is intended to differentiate cooperatives from other forms of business rather than delineate absolute prerequisites.

A cooperative is differentiated from a corporation by the fact that earnings are shared by patrons doing business with the firm rather than by conventional investors of capital (Knutson). Although some cooperatives are incorporated under business corporation statutes, they may be referred to as cooperatives if they operate according to cooperative principles. Cooperatives are distinguished from other nonprofit firms by the fact that they can make distributions to members.

## Justifications for Agricultural Cooperatives

The prevalence and success of business corporations raise the question, Why have cooperatives in agriculture? Corporations have greater investor flexibility (Alchian and Demsetz) that allows dissatisfied investors to extract investments and take more decisive action on poor management. Corporations may achieve greater benefits from diversification although this also

may constitute a liability (Williamson). The provision of collective control by members in a cooperative may cause their operational costs to be greater than the costs of a corporation (Hansmann 1988). Corporations may achieve greater economies of scale (Bonus), operate pursuant to modern corporation statutes (Centner 1985c), and are believed to have a better economic apparatus for making business decisions (Sisk). These features generally cause the corporate form of business to be a more attractive business option than cooperatives. At a minimum, cooperatives may not have any advantage over corporations except for special situations (Bonus; Enke).

Accepting the premise that the corporation often is a superior business option does not mean that cooperatives are not viable member organizations. Rather, acceptance of the premise means cooperatives directly competing with corporate firms may need to rely on one or more special justifications to achieve an advantage in a competitive market. Otherwise, a cooperative may be hard-pressed by corporate competition. Justifications include contract failures, antitrust defense, special knowledge of clientele, subsidies or regulatory exemptions, absence of a provider, and social needs. Establishment and use of a cooperative organization may be recommended if any one of these separate justifications is present.

### Market Failures

Market failures are common conditions justifying the cooperative form of business. Several different types of market failure are significant: oligopsony, asymmetric information including moral hazard associated with difficulties in policing the quality of performance, and restricted bargaining with a "holdup" problem.

Perhaps the best-known market failure is oligopsony, in which there exist few buyers and many sellers (Hansmann 1986; Porter and Scully). This failure may occur in agriculture because producers often have few potential buyers. To avoid oligopsony, producers may form a cooperative so that they have some control over the establishment of prices and allocation of profits.

A second type of market failure involves asymmetric information, including Akerlof's "lemons problem." When a buyer is not able to differentiate between quality and nonquality products, sellers may not have an incentive to provide quality products although there may be a demand for them. Historically, asymmetric information contributed to the success of farm supply cooperatives (Hansmann 1988). Prior to regulations of the seed, fertilizer, and feed industries, farmers relied on cooperatives to provide quality supplies because they could not differentiate between quality and nonquality agricultural inputs.

Asymmetric information, known as a type of "moral hazard," also may occur when difficulties exist in policing the quality of performance. Moral hazard may accompany agricultural production whenever there are opportunities for one person to renege on quality while the resulting costs are borne by another. An example is the absence of implied warranties accompanying the sale of livestock infected with a nonvisible disease. Without contractual warranty provisions, buyers are liable for the disease losses associated with the purchased livestock although they had no control over

preventing the disease prior to purchase. Thus opportunistic sellers may not employ husbandry practices that reduce or eliminate a disease problem, and unknowing buyers will suffer the costs of disease losses. Moral hazard may be reduced through a cooperative because producer-members receiving the benefits of residual rewards may be more inclined to provide quality products. Social reasons, such as personal knowledge of other members of the cooperative, also may act as an incentive for producers to supply quality goods (Bonus).

A third type of market failure involves the restricted bargaining position of agricultural producers with buyers when their products are ready for market. This may be called a "holdup" problem (Klein); buyers may "hold up" the benefits that should accrue to producer-sellers (Knoeber and Baumer). For example, where producers have investments in production facilities that cannot be used for other purposes, such as trees, vines, or livestock facilities, the absence of long-term sales contracts may leave producers with an inferior bargaining position. Buyers know that producers need a market because the products are already in production. Buyers may hold up producers by offering a low price or threatening to discontinue purchasing producers' products. Because producers have to sell their products, they may have to accept a lower price. A cooperative may provide a guaranteed market that is important for major and long-term investments that accompany production of some products.

A similar holdup problem may occur when buyers can reject perishable commodities as nonconforming goods due to a slight deviation from the contract terms although the producers did everything possible to meet the contract specifications and the produce is marketable. The producers would be held up in that they might be forced to sell their perishable products at a reduced price to avoid a total loss. Through a cooperative controlled by member-producers, producers have more control over the marketing of their products, and the cooperative could deal fairly with the nonconforming goods.

### Antitrust Defense

Antitrust charges against producers who jointly make agreements in an attempt to achieve common objectives or economies of scale have constituted a problem in the agricultural sector. However, a properly organized and operated cooperative can qualify for the Capper-Volstead affirmative defense and for other antitrust exemptions (Carter). The availability of the antitrust defense may justify organization as a cooperative for some groups.

### Knowledge of Clientele

In situations where it is important for a business organization to know about its clientele or where the organization may have important knowledge of clients, the cooperative may be an important form of business. This may help explain why lending institutions for agriculture were organized on a cooperative basis. Agricultural supply cooperatives may have an advantage over a comparable corporate supply firm because client-members convey better information to the cooperative of their future supply needs.

## Marketing Orders

The statutory right to group voting under federal marketing order legislation may provide an advantage for the cooperative form of business for some producers.<sup>1</sup>

## Subsidies or Regulatory Exemptions

The existence of governmental subsidies or exemptions from regulatory provisions may constitute justification for a cooperative (Hansmann 1987). A major quasi subsidy for cooperatives may be the special tax treatment available under the Internal Revenue Code (Hansmann 1986). Cooperatives qualifying under section 521 of the code are "exempt organizations" under Subchapter F. Rural utility cooperatives also may receive federal subsidies to assist with the provision of inexpensive electricity to rural residents.

Regulatory exemptions are varied. Capper-Volstead, federal marketing orders, and income tax legislation already have been noted. Additional regulatory exemptions, which may or may not impart a benefit to a particular cooperative organization, include the Securities Act of 1933, the Securities Exchange Act, state securities legislation, the Farm Credit Act of 1933, and state franchise and license taxes.

## Absence of Another Provider

In some instances, a cooperative may be justified because there is no alternative provider (Porter and Scully). This includes the absence of a viable provider of services, an outlet for products, or a supplier of inputs. This may be especially important for part-time and small farmers because they may experience difficulty in finding markets for their products (Brown). The successful development of cooperatives dealing with vegetable, fruit, and nut products has resulted in their becoming the only viable marketing outlet for some producers.

## Social Needs

A major historical factor in the formation of many cooperatives was the desire for an organization to respond to social, philosophical, and human needs. Such needs are basically related to human interaction, are dependent on scale, and still constitute a major justification for some cooperatives. They include psychological and emotional factors (Bonus), a mechanism for participation (LeVay), emphasis on social aspects of human and community development (Christy), a support mechanism, and sharing knowledge with others or training through the cooperative. For example, members obtain satisfaction from personally knowing a member of the board of directors or the knowledge that most directors have similar backgrounds or interests. Such reasons are primarily important for smaller cooperatives because when cooperatives become very large there is an impairment of the moral environment (Bonus).

Contemporary research also has advanced the cooperative form of business as being important for small organizations because of various social needs of members. Cotterill advocated consumer retail cooperatives. However, the organizations in his empirical analysis may have included non-

profit organizations, so a cooperative may not be prerequisite for the provision of social needs (Centner 1985b).

## Conditions Limiting Performance

Justifications for the establishment or existence of a cooperative would be expected to change over time. For example, many of the agricultural cooperatives formed in the latter part of the 19th century and the first two decades of the current century had important social purposes. Farmers felt a need for a social outlet related to their business activities. Over time, however, this need appears to have dissipated, in large part due to advances in transportation and communication technology. The current demise of the family farm and the competitiveness of commercial agriculture suggest that in many cases farm purchasing and marketing activities are viewed as business activities disassociated from social activities.

Although the breakdown of the social connection between producers and cooperatives may be viewed as objectionable, it is not clear that the most appropriate response is to increase efforts for resisting this trend. A preferred response may be to assist cooperative organizations in restructuring their charters and bylaws or in markedly altering their organizational structure to meet the challenges presented by changed conditions and altered relationships.

Moreover, cooperatives and their members need to realize that their organizational choice may be accompanied by limitations that detract from the performance of the organization. This section identifies several conditions that may affect the performance of cooperatives: overly restrictive governance, member investments in patronage refunds, negative cash flow through cooperative taxation, competition for cash payout, nontransferable assets and risk, social or economic democratic control, costs to organize, principal agent problems, and professional management. The identification of these conditions is intended to enable cooperatives and their members to relate the justifications for cooperatives with accompanying limitations to determine whether their organizational structure is conducive to their objectives and goals and whether their organization provides the best vehicle for meeting group objectives.

## Overly Restrictive Governance

State statutory provisions governing the organization of cooperatives and strict adherence to traditional principles of cooperation may provide an overly restrictive governance apparatus that detracts from cooperative performance. The state enabling legislation tends to be outdated, and in many cases the provisions limit organizational and managerial flexibility. For example, some statutes prescribe membership requirements for directors that may preclude qualified individuals from beneficially serving a cooperative as a director (Centner 1983). The lack of uniformity among statutes also restricts performance because of the lack of a common set of regulatory provisions. Firms may find it advantageous to incorporate under the modern business-oriented provisions of corporation laws.

Strict adherence to principles of cooperation also may detract from the performance of cooperatives. The literature citing historic and traditional

principles of cooperation (Abrahamsen and Scroggs; Bakken and Schaars; LeVay; Roy; U.S. Department of Agriculture) should not be interpreted as advancing selected cooperative principles as mandatory prerequisites for the cooperative form of business. The definition of cooperatives needs to remain somewhat amorphous to allow each organization to respond to the needs of its members (LeVay). Individual cooperatives might be better served by addressing their particular mission rather than attempting to conform with historic or traditional cooperative principles. The coordination of justifications for a cooperative organization with member needs should be found to be more important than conformance with cooperative shibboleths based on the theoretical underpinnings of cooperation.

### Member Investment in Patronage Refunds

Economic returns through patronage refunds is an important component of the cooperative form of business (Rhodes). Cooperatives enable savings or profits to go to their members rather than investors (Roy). Although the preclusion of outside investors from making money from agricultural business activities is appealing, a more important issue is whether the patronage refund system is economically beneficial to cooperative members.

Retained patronage refunds require patrons to make investments in their cooperative. Depending on prices of competing corporate firms, funds invested in the cooperative may cause cooperative members to have fewer funds for use in purchasing property, equipment, facilities, and production supplies. Or such investment may preclude members from investing elsewhere or require them to borrow money to compensate for funds that remain as an investment in the cooperative. Thus cooperative members may need larger mortgages or production loans.

An additional disadvantage of the cooperative may occur when an income tax system taxes capital gains at a lower level than other income (Caves and Petersen). Lower tax rates for capital gains may enable a corporation to gain an advantage vis-à-vis a cooperative. Because current income taxation does not contain lower rates for capital gains, this currently is not a disadvantage.

Although there is nothing inherently wrong with members investing in cooperatives, the question farmers should ask is whether an investment in patronage refunds is better than the available options. Would a member be better off without a patronage investment in a cooperative because the funds could be used to pay off debts or invested in a more lucrative opportunity? This will vary depending on the prices offered by a cooperative requiring member investment vis-à-vis the prices of an alternative firm not requiring investment.

### Negative Cash Flow through Cooperative Taxation

Cooperatives qualifying under the provisions of Subchapter T of the Internal Revenue Code may reduce their taxable earnings at the firm level (Noakes; U.S. Department of Agriculture). One of the unique provisions of Subchapter T is the ability of a cooperative to take a deduction for earnings it currently retains but promises to pay patron-members in the future.

Subchapter T allows cooperatives to issue qualified written notices of allocation whereby the cooperative agrees to pay each patron a specified amount but retains up to 80 percent of the amount, which will be paid to the patron in the future. However, the cooperative patron is required to report the entire amount of the written notice as taxable income. Patrons also may have to pay additional taxes under the Federal Insurance Contributions Act (Junge and Ginder).

As a result of these provisions, cooperative patrons may be taxed on funds they currently do not have in their possession. In effect, the promise that patrons will receive funds in the future incurs tax liability. When patrons finally do receive the funds, there is no additional income tax liability because the tax already has been paid.

The impact of this tax scheme varies according to patrons' individual tax situations. However, the requirement that patrons pay income tax on funds they have not received can be expected to inconvenience some taxpayers and may have adverse consequences. For example, consider the tax consequences for the 1987 tax year of a patron who was in the 28 percent income tax bracket. If this patron received only 20 percent of funds in cash and the remainder in a qualified written notice of allocation, the patron could experience a negative cash flow from the earnings received from the cooperative. This would depend on whether the patron received any non-taxable payments for qualified written notices of allocation issued in previous tax years.

Arguably, the fact the cooperative is not taxed on earnings paid to patrons implies the cooperative has more funds to return to patrons. However, this advantage must be weighed against two major effects of cooperative taxation on individual patrons. First, the retention of earnings by the cooperative reduces the funds currently paid and available to patrons. Thus it may be expected that patrons have fewer funds to use for paying off debts and may have to borrow funds from other sources to compensate for the funds withheld by the cooperative. Second, patrons incur tax liability on amounts that are not in their possession. As noted, this may result in a negative cash flow. To avoid this problem, consideration might be given to a payment plan issuing nonqualified written notices of allocation (Royer).

### Competition for Cash Payout

Given the patronage options available to cooperatives, members have different claims to earnings invested in the cooperative. The various claims may create a "common property problem" or "horizontal problem" (Vitaliano; Porter and Scully). For example, older members may want their cooperative to pay less in cash and more in paper for current patronage so that it has more funds for the cash redemption of older written notices of allocation. Retired members will want to extricate their earnings (Centner 1985a).

Disagreements concerning financing plans may cause dissention among members and reduce cooperative spirit. Each cooperative should analyze its operations to determine whether cash payout problems exist. If such problems do exist, can anything be done to ameliorate the adverse effects? Perhaps some form of game-theoretic approach, as proposed by Staatz, could assist cooperatives in an attempt to minimize problems.

### Nontransferable Assets and Risk

The limited activities of most cooperatives, the fact that members instead of third parties own the cooperative, and the commitment of cooperatives to specific business activities through capital investments limit opportunities to diversify or spread risk (Porter and Scully). Because corporations often spread risk through outside investors and diversification into products across different sectors of the economy, a cooperative may have more risk than a corporate firm. Every cooperative should analyze its situation to determine whether there are ways to reduce risks, such as combinations with other firms or expansion of activities.

### Democracy through Social or Economic Control

Cooperative members conducting large amounts of business with a cooperative may think they do not have an appropriate share of control in the election of directors because cooperative democracy generally is based on a "one-member/one-vote" rule instead of control determined by capital contribution (Savage) or participation in the organization (Baarda). Presumably this rule allows the needs of the small farmer to count as much as the wealthy (Center for Rural Affairs). In reality, it is not clear that large or wealthy farmers are underrepresented in their voice concerning the election of directors.

However, if there is dissatisfaction with a perceived underrepresentation of the interests of members conducting large volumes of business with the cooperative, it may interfere with cooperative performance. To alleviate this potential problem, proportional voting based on patronage might be considered. As noted by Aresvik, the distinction between one-member/one-vote and proportional voting concerns value premises. Although the provision of the same voting rights to all members is founded on a laudable value system, cooperatives functioning as business entities may be expected to structure voting values based on economic terms. Proportional voting based on patronage may be an appropriate form of democracy given the economic nature of a firm (Phillips).

### Costs to Organize

Formation and the continued operation of a business organization involve transaction costs (Williamson). Although all types of firms have transaction costs, collective choice mechanisms of cooperatives may involve substantial additional costs compared with corporations (Hansmann 1988). Cooperatives may experience increased costs if members need to learn how to operate the firm, become informed about the firm's operations, and communicate to other members, in contrast to organizations where specialized management makes the decisions.

For an individual organization, are these additional costs more than the potential benefits to patrons from having a cooperative organization? Or would it be cheaper to use an alternative organization instead of establishing or administering a cooperative (Klein, Crawford, and Alchian)? This will depend on the availability of an alternative business organization or alternative business arrangements and the needs for a cooperative. If there

are other firms offering the same or similar services as an existing cooperative, perhaps merger or consolidation could reduce transaction costs.

### Principal Agent Problems

The structure of cooperative boards of directors raises several questions about whether principal agent problems exist. As principals, do member-directors have adequate information to measure the performance of the agent managers (Porter and Scully)? Helmberger and Hoos raise the question of whether some cooperative boards of directors are motivated by survival rather than member interests. Hansmann (1987) raises the issue of whether boards exercise effective control over the firm's managers. Additional literature inquires whether board members are adequately trained to make business decisions (Centner 1983) or are constrained by special-interest groups (Helmberger). Failure of boards to make good decisions may seriously impair the profitability of the cooperative.

Of course, principal agent problems also exist in noncooperative business organizations. However, for the corporate form of business, the salability of stock and the transfer of proxies may facilitate responsive action to poor performance by agent managers.

### Professional Management

The question of whether cooperative management operates as effectively and efficiently as corporate management needs to be addressed by every cooperative. Small cooperatives may combine decision management and control functions in an efficient manner (Fama and Jensen). In addition, small cooperatives may use volunteer labor and achieve savings (Cotterill). However, the expertise needed for the management of most agricultural business cooperatives requires professional management (Trifon). Are boards willing to pay for good management, and does the lack of the specialization of decision management, as compared with corporations (Fama and Jensen), detract from the adaptability of cooperatives to change? Are cooperatives overly reluctant to eliminate unprofitable services or products (Garoyan)? The combination of social purposes with business may lead to poor management that detracts from the profitability of the organization.

### Concluding Remarks

The cooperative form of business remains a necessary and viable option for some agricultural producers. Market failures, social needs, and other justifications suggest that a cooperative may provide an excellent vehicle for members to achieve collective goals. Every cooperative should determine whether one or more justifications currently support its organizational structure.

However, in some cases the foundations justifying the formation of a cooperative may have dissipated so that the organizations lack their original historic mission. In other cases, growth, changes, and new legislation may cause the underpinnings supporting the justifications for the cooperatives to have become so eroded that the organization no longer functions as an effective or efficient provider of services. For example, a cooperative



may have grown to such a large size that the social interaction of members with directors is not significant. Or the development of alternative marketing opportunities through other firms may cause the activities of a cooperative to be redundant. Or enactment of new legislation regulating rates or prohibiting unfair business activities may obviate previous needs for a cooperative organization.

Thus every cooperative needs to analyze its activities, objectives, and position in the marketplace to determine whether it constitutes a viable membership organization. Is the cooperative related to a justification? Next, does the justification for a cooperative organization outweigh any limitations that may accompany this form of business? Third, what other options are available in the form of alternative firms providing the same or similar services, for the divestment of unprofitable activities or facilities, or for merger or consolidation? In the absence of sufficient justification, cooperative members should realize that there may be economic reasons for favoring an alternative business arrangement.

### Note

1. 7 U.S.C. § 608(c) (1982).

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