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Cooperative Principles and Equity Financing: A Critical Discussion

by

Jeffrey S. Royer

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Invited Paper

Cooperative Principles and Equity Financing: A Critical Discussion

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This paper examines the role of the "principles of cooperation" in shaping the methods used by farmer cooperative associations for the provision of equity capital by members. Cooperative principles and financing practices based on them are evaluated in the context of some common issues and conflicts among patrons. The characteristics of a cooperative are compared with those of a patron-owned corporation, and two case studies in which patrons chose to organize businesses as patron-owned corporations are discussed. The paper concludes by making recommendations for patron-owned businesses operating within the cooperative framework.

The so-called basic "principles of cooperation" are referred to frequently and with considerable ardor. Seldom is their significance seriously questioned.

—Richard Phillips, 1953

On one level, these words are true today, nearly 40 years after they were written. To say that the "principles of cooperation" are cited frequently is a significant understatement. They are included in any introductory discussion of cooperatives. In fact, adherence to cooperative principles serves as the de facto definition of what a cooperative is and how it differs from other forms of business organization. As such, these principles, as a concept, occupy a venerated position among cooperative writers—a position that usually transcends serious scrutiny or challenge.

On another level, however, these principles have been subject to continual reexamination. This results in part from the fact that there has never been a consensus on what individual principles should be included. Conse-

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Jeffrey S. Royer is associate professor of agricultural economics, University of Nebraska-Lincoln.

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quently, numerous lists exist, and cooperative thinkers have spent considerable effort discussing the merits of particular principles and their interpretations. Such an environment has provided cooperative organizations considerable flexibility in determining the practices they follow. Despite the fervor with which specific principles are advanced, cooperative practices often appear to be influenced as much by individual self-interests, economic considerations, and statutory restrictions. Yet any discussion of the changes cooperatives must make in order to remain viable businesses must focus on the principles cooperatives use to define themselves.

This paper examines the role of the "principles of cooperation" in shaping the methods used by farmer cooperative associations for the provision of equity capital by members. Cooperative principles and financing practices based on them are evaluated in the context of some common issues and conflicts among patrons. Particular attention is given to issues regarding the equitable treatment of patrons. The reader will observe that the options available to cooperatives are frequently limited by the extent to which some principles have been incorporated into federal and state law. The characteristics of a cooperative are compared with those of a patron-owned corporation, and two case studies in which patrons chose to organize businesses as patron-owned corporations are discussed. The paper concludes by making recommendations for patron-owned businesses operating within the cooperative framework.

Democratic Control and Proportional Voting

Most early writers on cooperative principles included as a basic principle the concept of democratic control, under which each member of a cooperative association was given one vote. This voting mechanism worked satisfactorily for most local farm supply, service, and consumer cooperatives, given the homogeneity of their memberships. However, as the cooperative movement in the United States grew, particularly in some western states, the size and nature of producer operations became increasingly heterogeneous. As a result, laws in a number of states began sanctioning proportional voting. Today there is still active debate about whether the principle of democratic control should be reinterpreted to include proportional voting.

According to Robotka, the traditional idea that control in a cooperative must be on a democratic or personal basis rather than a financial basis stems in part from the idea that a cooperative is an association of individuals instead of an impersonal organization of capital. The beginnings of the cooperative movement in England coincided with the campaign for universal suffrage. It was only natural that workers, denied representation in government affairs, would insist that there should be no discrimination among members in the control of their own organizations. Democratic control was also partly a reaction to the corporation, in which control often was concentrated in the hands of a few through the restriction of voting to common stock, the use of proxies, and other devices (Nourse).

Robotka pointed out that when the principle of democratic control was founded, a high degree of homogeneity in property ownership existed

among members. He believed that during the next century equal voting continued to meet with approval by cooperators primarily because of political and psychological reasons as well as the fear that unequal voting might result in favoring interests represented by wealth instead of the interests of members as patrons. Nonetheless, he asserted:

> It should be clear, however, that equal voting would tend to exclude those who might feel that their interests might not thus be adequately protected. For example, large-scale producers may refuse to join an organization consisting predominately of small-scale producers, and vice versa. *Under certain circumstances which necessitate the collaboration of a heterogeneous group, unequal voting has been found to be the only basis on which the necessary amount of participation was obtainable* [emphasis added]. (p. 112)

Citing examples from the United States and Europe, he concluded:

> From a strictly economic point of view, voting rights would be apportioned according to risks assumed, and since in a cooperative these are borne proportionally to patronage, voting would be based on patronage, if not strictly proportional thereto. (pp. 112–13)

This conclusion was shared by Phillips, who stated, "From the standpoint of economic structure, voting in the cooperative association [should] not be shared on a per firm (one-firm one-vote) basis, but on a proportional basis" (p. 77).

Support for this idea was also voiced by Schaars, who said, "Voting on a basis of the amount of business transacted with the cooperative is likewise democratic in that it recognizes the differences in economic interests of the members and the importance of volume to an association's effectiveness as a marketing unit" (p. 192). However, he cautioned:

> Invested capital cannot become the basis of control (i.e., voting on the basis of shares of stock owned) without the fear that the institution will be operated to maximize dividends upon stock instead of benefiting primarily and largely the member-patron, unless (a) there is a limitation on the number of shares any member may own; (b) proxy voting is absolutely prohibited; (c) and a ceiling is placed on the dividends payable on stock. (pp. 192–93)

Each of the safeguards mentioned by Schaars is in place in many states (Baarda 1982, 1986). More recently, Knutson has criticized the sluggishness with which cooperatives have adopted pricing and control structures attractive to large-scale farm operators. The remedies he has offered include voting in proportion to the volume of business or stock.

Arguments that voting rights should be apportioned on the basis of patronage are convincing from both a theoretical and practical perspective. It is only fair that those patrons who have more equity at risk and a greater interest in the operations of the cooperative should have a greater voice in its decision making. There is a fear among some that proportional voting can lead to the domination of smaller producers by larger ones. However,

this situation should be no less acceptable or equitable than the domination of larger producers by smaller ones, as is possible under equal voting mechanisms. If cooperatives are to be responsive to the needs of larger producers, who in some situations may be essential to the continued success of the organization, voting should be apportioned according to patronage. Unfortunately, proportional voting is permitted only in a minority of states (Baarda 1986). In many states, the adoption of an unequal voting scheme would require changes in the state statutes regarding cooperatives.

Financing in Proportion to Patronage

Although not generally included among the principles of cooperation, the concept of financing in proportion to patronage was discussed by Abrahamsen. Although he observed that the practice has not had general acceptance, he believed it was a sound practice, consistent with established cooperative philosophy and the idea of member ownership. According to Abrahamsen:

> Most cooperative members perhaps would agree that there is merit in strongly urging, if not requiring, that the financial obligations of members to their cooperative be in proportion to the volume of business they do through it. In most instances, however, this is not practical, especially when starting a cooperative. Some members are in a position to make relatively greater contributions to cooperative financing than others, who may be able to meet only the minimum financial requirements for membership. Also, there is the very practical problem of developing equitable techniques for maintaining this principle. Although it might easily be determined for an initial period, changes in individual patronage, as well as in overall volume from year to year, could cause problems in administering such a program. (pp. 65–66)

Cobia et al. elevated the proportionality concept to the level of a principle and used it as a criterion for evaluating alternative equity retirement plans. They argued that it was a logical extension of the principles of service at cost and ownership by members and the doctrine of fairness that pervades cooperative literature. They asserted, "The logic is compelling. If benefits are distributed according to patronage, benefactors should provide equity or risk capital in the same proportion" (p. 3). Barton (1989b) has listed an entire class of "proportional principles," by which member voting, patron equity investment, and the distribution of net earnings are proportional to use.

Financing in proportion to patronage is based on the "concept of proportionality," which is rooted in the work of Phillips. He stated:

> This *proportionality* determines the manner in which the participating firms will share all inputs, including entrepreneurial inputs, and all outputs—all costs and benefits—of the joint plant. In order to achieve a static optimum allocation of resources *among* the participating firms, the entrepreneurial decisions, the bearing of uncertainties, the financial responsibility, the economic use, the costs, and the economic benefits in connection with the joint

> activity must be shared by the firms on the basis of this proportionality. . . . *The financial responsibility (i.e., either providing the actual capital, or paying the interest and providing the security required to obtain it) will be shared on a proportional basis* [emphasis added]. (p. 77)

The greatest drawbacks to financing in proportion to patronage are the difficulties cited by Abrahamsen. Under normal circumstances, the proportion of patronage attributable to individual patrons will fluctuate from year to year. Thus, under strict adherence to the concept, a cooperative would constantly have to make annual adjustments, requiring additional investments from some patrons while refunding some of the investments of others. However, this adjustment problem is not serious conceptually. It can be handled easily within the framework of a base capital plan although most base capital plans employ a moving base period of several years to smooth out these adjustments and minimize the exchange of funds back and forth between the cooperative and its patrons.

More important is the burden that adherence to proportionality places on newer members. These members, particularly if younger, may be incapable of making immediate investments in the cooperative in line with their use. Most cooperative advocates would probably agree that it would place an unfair burden on new patrons to demand that they immediately invest their full share. In addition, some cooperatives may find it necessary to make such a concession in order to attract new members. However, in situations where a cooperative is able to provide members greater returns than they otherwise would obtain, it may be successful in demanding that new members immediately put up their proportionate share of financing.

Service at Cost and Limited Returns to Equity Capital

Fundamental to cooperation is the concept of service at cost, i.e., that cooperatives should provide goods and services to members at cost. Cooperatives are not organized to earn profits in the manner of other firms. Instead, they are required to charge prices equal to costs or refund any surplus of revenues over costs to members in proportion to patronage.

Most businesses employ the conventional accounting concept of cost, which includes interest expenses on borrowed capital, in determining profit. However, because cooperatives do not return earnings to investors on the basis of equity ownership, application of the accounting cost concept to cooperatives fails to take into consideration the contribution of the equity capital provided by members. Rewarding equity capital for this contribution is certainly consistent with the principles of cooperation. No principle prohibits payment of dividends on equity capital. The principles only restrict cooperatives from paying unlimited returns to equity capital as a means of preserving the essential nature of the cooperative association.

The literature generally supports the notion that cooperatives should pay a return to equity capital but that this return should be limited to a "fair" or competitive rate. According to Engberg, "Any profits or net income after paying expenses, including a fair rate for the use of capital, belongs to the members. They share in such benefits and savings in proportion to the

amount of patronage rather than in proportion to the amount of their investment" (p. 3). Schaars stated:

> Capital, like other factors of production, must be rewarded, but this reward is limited to the "going rate" just as the rewards going to labor[,] for the use of land[,] and for management are restricted to competitive rates or to what the services are worth to the association. Capital does not become the claimant to the net proceeds of the organization, for if it did, then the interests of the investors would be paramount to those of the member-patrons. It would furthermore imply that the major responsibility for success (or failure) was the capital investment rather than the patronage of the members. Consequently, in order that member-patrons may obtain the major benefits of cooperative action, limited returns for the use of capital and the other agents of production are essential. (p. 193)

Determining what is a "fair" rate, or even a competitive rate, can be fraught with difficulty. Most economists would argue that cooperatives should return to equity providers their opportunity cost of the capital. In one study, Beierlein and Schrader used the after-tax return to farm equity for the opportunity cost of capital. Snider and Koller as well as Dahl and Dobson used the price of short-term debt. The latter argued that because of the relatively small size of most patronage dividend allocations, farmers would use patronage dividends to retire short-term debt rather than long-term debt or, presumably, to invest in capital assets. An equally valid argument could be made for using the interest rate paid on investment in a liquid asset, such as a money market fund, plus a premium for the risk that the cooperative might fail or would be unable to redeem equity allocations in the future.

As Fischer noted, cooperatives that pay a rate of return to equity equal to its opportunity cost are operating on an economic cost basis. According to Fischer, failure to do so, as the result of not paying dividends on equity capital, can produce suboptimal results for a cooperative. If no dividends are paid, the net price of farm inputs, after subtracting the patronage dividend, will be too low, and patrons may demand a quantity greater than the optimal quantity determined by the marginal economic cost. Dahl and Dobson cited studies that indicated that failure to consider the opportunity cost of equity has led cooperatives to rely too heavily on equity capital, thereby resulting in capital costs that are higher than necessary, and to underestimate overall capital costs, thus resulting in overinvestment in assets.

Another reason for paying a return on equity capital is to compensate for disproportionalities between member equity and patronage shares. According to Robotka:

> Since any return members receive on their capital contributions would either be added to the expenses of the services they receive or be deducted from proceeds from sales accruing to them, there would be no point in paying such a return. Members would merely be shifting such amounts from one pocket to the other. In practice,

> however, capital contributions are frequently not made in proportion to the use participants anticipate making of the services of the organization. In such cases, the payment of a return on capital is justified on the ground that it compensates for disproportionalities in capital contributions. *The members who contribute capital in excess of their proportionate share, in effect, loan to those who contribute less than their proportionate share, and the return is, therefore, in the nature of interest rather than a distribution of residual income* [emphasis added]. (p. 111)

Most state incorporation statutes place specific limits on the dividend rate a cooperative can pay on equity capital, usually 8 percent or less (Baarda 1986). Cooperatives qualifying for federal tax status under section 521 of the Internal Revenue Code are restricted from paying more than the legal rate in the state of incorporation or 8 percent, whichever is greater. In addition, the Capper-Volstead Act restricts cooperatives that allow members more than one vote because of the amount of stock or membership capital owned from paying dividends on that capital in excess of 8 percent.

This 8 percent limitation has been restrictive during recent years when interest rates were high, and cooperatives in some states have lobbied their state legislatures to raise the limit. However, the original intent of the 8 percent limit was not to force cooperatives to pay low rates of return on equity, as it might seem today. That rate, which became the accepted standard in the early 1920s with passage of the Capper-Volstead Act and the Standard Act, upon which many state incorporation statutes were modeled, was for several decades virtually usurious relative to market rates.

Despite recent high interest rates and some efforts to increase state limitations on dividend rates, it seems that it is the practices of cooperatives themselves, and not statutory restrictions, that have limited the return on patron equity capital. According to the most recent U.S. Department of Agriculture (USDA) financial profile of U.S. farmer cooperatives (Royer, Wissman, and Kraenzle), only 22 percent of cooperatives that incurred positive net earnings in fiscal 1987 paid dividends on patron equity. Only 1.6 percent of net earnings after deducting net losses were distributed as dividends on equity, an amount equivalent to a return of 0.2 percent on total allocated equity.

It seems that to a great extent, cooperatives have simply chosen to return savings to members on a patronage basis. Sample bylaws published by USDA contain this provision:

> Section 1. *Operation at Cost.* The association shall at all times be operated on a cooperative service-at-cost basis for the mutual benefit of its patrons. *No interest or dividends shall be paid by the association on any capital furnished by its patrons* [emphasis added]. (p. 578)

Although footnotes provide instructions to those cooperatives that desire to include provisions for the payment of dividends, one also includes this information: "A number of cooperatives, however, are choosing to eliminate such dividends because their members prefer to receive all returns on a patronage basis" (p. 565).

This choice may have considerable appeal in the minds of cooperative organizers, particularly given the optimism they may hold concerning the future performance of the cooperative's revolving fund. Expecting smooth performance of the fund, they do not foresee a need to pay dividends on member equity in order to remedy inequities arising from disproportionate equity holdings. Given a well-functioning revolving fund, payment of dividends on equity reduces the funds available for patronage dividends. In addition, most of the equities accumulated by patrons may be derived from retained patronage dividends, and patrons may see no reason to receive dividends on them. Once inequities become apparent, the payment of dividends is likely to be perceived as a stopgap measure that is counterproductive to the performance of the revolving fund in the long term.

The tax rules for cooperatives may also play a part in explaining the preference for returning savings as patronage dividends. Except for cooperatives qualifying for section 521 tax status, dividends on capital stock are included in the cooperative's taxable income. Thus, payment of dividends on capital stock produces a tax burden on the cooperative that does not occur when earnings are distributed as patronage dividends. This consideration has become more important recently as many cooperatives have found it increasingly difficult or economically undesirable to maintain section 521 status.

In 1979, the U.S. General Accounting Office (GAO) recommended that the secretary of agriculture should develop a legislative proposal making it mandatory for cooperatives to pay interest or dividends on retained equities and/or retire these equities within a certain period if cooperatives did not voluntarily adopt more equitable equity redemption programs. According to GAO, mandatory payment of dividends on retained equities would benefit inactive equity holders by compensating them for use of their capital and would provide an economic incentive for cooperatives to retire equities on a more timely basis. A study of that proposal (Royer 1983) concluded that under mandatory equity programs, cooperatives would be required to service equity in a manner similar to debt, diminishing their capacity to absorb the uncertainties of the business environment and possibly reducing the availability of credit from lenders who might view the programs as a threat to the ability of cooperatives to service debt. As a possible alternative, the study recommended requiring payment of dividends on only those equities held by inactive equity holders.

Another alternative has been suggested by Jones. He presented an alternative method for computing patronage dividends that is based both on the proportion of patronage attributable to the member and the member's relative equity contribution. Such a method of determining patronage dividends probably would not meet the Internal Revenue Code's definition of a patronage dividend, which clearly states that a patronage dividend must be based on the quantity or value of business done with or for the member. Jones's method for computing patronage dividends is equivalent to distributing conventional patronage dividends while paying interest to members who have invested more than their proportionate share of equity and assessing interest for members who are underinvested. Presumably, interest payments to members would be subject to income tax as dividends on

capital stock, and interest payments received by the cooperative would be considered nonpatronage income.

Financing by Former Patrons

Financing by former patrons is an important problem that directly contradicts the principle of member ownership. According to Abrahamsen:

> Support appears substantial for the idea that *member ownership* is a basic cooperative principle. It seems important to emphasize that cooperatives should constantly seek to keep ownership in the hands of member-users. As to the three principles . . . — operation at cost, member control, and member ownership—the ideal situation prevails when the members who benefit from cooperative patronage are also the ones who own the cooperative and control its operations. (p. 60)

Nonetheless, a 1974 survey by Brown and Volkin revealed that 69 percent of the centralized cooperatives surveyed held allocated equity issued to members no longer active. In fact, 56 percent of the equity holders were inactive, and they held 22 percent of total allocated equity. More recent USDA data indicate that annually the percentage of memberships reported as inactive has fluctuated between 19 and 22 percent (Frederick).

Thus, a situation exists in which a substantial proportion of the equity in many cooperatives is held by individuals with no operational interests in the organizations. Further, these equity holders generally do not receive compensation for the opportunity costs or risks associated with providing this capital. The situation is even more salient when one considers that these equity holders are often disenfranchised by their organizations so that they have no direct voice in determining the policies of the organizations, particularly those policies that affect them directly, such as those regarding the payment of dividends on equity and equity redemption.

This disenfranchisement results from bylaw provisions that permit a cooperative to terminate the membership and voting rights of members who have ceased patronizing the organization. For example, sample bylaws published by USDA contain this provision:

> Section 2. *Suspension or Termination.* If, following a hearing, the board shall find that a member has ceased to be an eligible member or has not, for a period of two (2) years, marketed through the association the products covered by a marketing contract or contracts with the association or has not otherwise patronized the association, it may suspend his rights as a member or terminate his membership. Upon termination of membership in the association, all rights and interests of such member in the association shall cease. . . . (p. 568)

Adoption of this type of provision is probably not motivated by a local desire to maintain control of the cooperative by active patrons as much as it is an effort to comply with statutory requirements designed to limit membership to agricultural producers. Incentives to adopt such a policy

include: (1) protection from antitrust legislation offered marketing cooperatives by the Capper-Volstead Act, which requires members to be engaged in the production of agricultural products; (2) deductions from federal taxable income allowed farmer cooperatives qualifying under section 521, which specifies that substantially all voting stock must be owned by agricultural producers who market farm products or purchase farm supplies through the cooperative; and (3) state incorporation statutes that require that members may include only persons engaged in the production of agricultural products to be handled by or through the association (Baarda 1986).

Certainly, there is justification for protecting the cooperative association and the operational interests of active members from the equity interests of inactive or "sleeping" members. British scholar LeVay asserts that

> the 'sleeping' membership is a potentially dangerous ingredient in a co-operative. It appears even more dangerous when one considers another objective—the realisation of the 'true' value of share capital kept nominally at par. Members no longer using their society may have invested considerable sums in it. . . . With non-appreciation of shares and the relatively low rate of interest they earn, such members may contemplate the dissolution of the society, particularly if its book asset value is high. If the rules specify that on dissolution any assets remaining after commitments have been met should be distributed in proportion to shareholding, then such members will gain from precipitating its demise. (p. 14)

An argument for the protection of the operational interests of active members can probably be made just as effectively on the basis of short-term conflicts. If voting rights were retained by inactive members, who may constitute a majority of the membership, the provision of an adequate level of services or the financial well-being of the cooperative might be threatened by the interests of inactive members, which would include the payment of dividends on equity capital and the more timely redemption of equities.

However, it seems that the solution to these conflicts should ideally be based on mechanisms designed to balance the operational interests of active members and the equity interests of former patrons, and this is unlikely to occur with the disenfranchisement of the latter. In fact, the existence of a sizable class of equity holders that neither receives compensation nor has a voice in shaping the policies of the organization would be indefensible under most circumstances. It is difficult to conceive of a similar situation existing among other business organizations for long without an impassioned outcry for legal or legislative remedy. Yet the situation exists within the cooperative community and is exacerbated by law.

Unallocated Retained Earnings

Unallocated retained earnings are earnings retained by cooperatives and not allocated to individual patrons. Although some level of reserves may be required by state law, unallocated earnings are often accumulated at a cooperative's discretion as a buffer against future operating losses and the

need to charge these losses against the allocated equity accounts of patrons. Although unallocated earnings are frequently derived from patronage business, nonpatronage income has been the most important source of unallocated equity. Except for cooperatives qualifying for section 521 tax status, nonpatronage income cannot be distributed to patrons as part of a deductible patronage dividend and therefore is included in cooperative taxable income. Patrons who receive distributions of nonpatronage income generally must include these distributions in their taxable income as well. Thus, many cooperatives find it sensible to retain nonpatronage income remaining after income tax as unallocated equity.

Recent data indicate that cooperatives are relying more heavily on unallocated earnings in their financial structures. According to the latest USDA financial profile (Royer, Wissman, and Kraenzle), 21 percent of cooperative equity was held in unallocated form in 1987, and 27 percent of net earnings were retained as unallocated earnings. More than 81 percent of the cooperatives that reported net earnings retained unallocated earnings. Some of the increase in the retention of unallocated earnings is associated with the decline in the proportion of cooperatives qualifying for tax treatment under section 521, which limits reserves to what is reasonable or required by state law.

Many of the cooperatives that incurred operating losses in the early 1980s wrote their losses off against unallocated equity reserves, apparently in part because of a reluctance to burden patrons directly with the losses during a period in which they too were experiencing financial difficulties. Undoubtedly, much of the increase in the proportion of net earnings assigned to unallocated equity reserves represents an attempt to rebuild these buffers. However, comparisons indicate that cooperatives are continuing to rebuild their unallocated equity bases beyond earlier levels. One possible conclusion is that the experiences of the 1980s altered cooperative attitudes about accumulating unallocated reserves, partly because of changes in expectations about future losses.

Some cooperative financial experts have advocated greater use of unallocated earnings based on what they consider to be financial advantages over retained patronage dividends. Bradley, for example, suggested that cooperatives consider replacing revolving funds consisting of retained patronage dividends with permanent unallocated equity. According to him, corporations that accumulate retained earnings without an obligation to redeem them have an advantage over cooperatives that have an obligation to redeem allocated equity on a revolving basis. Ryan argued that because there is no expressed or implied call on unallocated equity, it can be used to acquire more leverage than allocated patronage dividends.

Both Bradley and Ryan observed that larger farmers might prefer not to receive patronage dividends because the cash portion would not be sufficient to cover the income tax on the total distribution. Indeed, research indicates that patrons might be financially better off if they received 100 percent cash patronage dividends and their cooperative acquired its equity capital exclusively from unallocated retained earnings. In one study (Royer 1982), such a program provided patrons a higher discounted after-tax cash flow at some tax and discount rates than plans based on either qualified or nonqualified written notices of allocation.

Perhaps opposition to greater use of unallocated earnings has been best articulated by Murray, who stated that there are "serious negative implications" in the growth of unallocated earnings or reserves. According to Murray:

> (a) It diminishes the importance and responsibilities of the members as the primary source of finance in a co-operative.
> (b) As reserves contribute to the asset value of the co-operative there is a danger that the members' financial stake in the co-operative becomes disproportionate to their trading or patronage interests. Members may be tempted to look for a financial return on their collective investment rather than a return related directly to their use of the co-operative's services.
> (c) Over time, the increase in institutionally controlled funds reduces the importance—and thus the authority—of the user members in relation to the authority of the co-operatives' officials. (p. 85)

The argument that the accumulation of unallocated equity reduces the interest and authority of members is not universally convincing. According to Dunn:

> A potential conflict . . . arises from the same feature of unallocated capital that makes it attractive for use as risk capital: the distancing of the members' economic situation from that of the cooperative. Members of a cooperative whose financial structure is dominated by unallocated capital may become complacent about the cooperative's activities or condition because they have little financial stake in the organization. If the level of member interest is reflected in the intensity of the board of directors' concern, such complacency can evolve into loss of effective control. *However, abdication of the control of unallocated equity to management is a failure of the board of directors, not a characteristic of the capital* [emphasis added]. (p. 89)

The financial composition of most cooperatives probably includes enough allocated equity to guarantee that members have a financial stake in the organization. It seems that some of the apathy that exists among members is the result of a feeling of powerlessness common to participants in many organizations governed by representative democracies.

Another concern that has been voiced is that the existence of substantial unallocated equity will provide current members an incentive to dissolve the cooperative organization for personal gain. It is not obvious how real this threat is because members must weigh their operational interests in the cooperative against the value of the unallocated earnings, and the attractiveness of these equities may be diluted by a bylaw provision or state law requiring the assets of the cooperative to be distributed among both current and former members on a patronage basis (see USDA and Baarda 1982). In such a case, it seems that the existence of unallocated equity would no more threaten the existence of a cooperative than would allocated equity.

The greatest challenge to continued, unbridled accumulation of unallocated earnings may come from arguments based on the principle of service at cost. A conservative interpretation of this principle would hold that earnings from both patronage and nonpatronage sources should be allocated to patrons and that operating losses should be assigned to patrons according to their patronage during the loss year. This position has been articulated by the Internal Revenue Service (IRS), and sample bylaws published by USDA include these provisions:

> Section 2. *Refunds and Patrons' Capital.* . . . To assure that the association will operate on a service-at-cost basis the association is obligated to account on a patronage basis to all its patrons for all amounts received from the furnishing of . . . services in excess of operating costs and expenses properly chargeable against the type of service furnished. . . . The association is obligated to make payments of all such amounts in excess of operating costs and expenses in cash refunds or by credits to a capital account for each patron. . . . All other amounts, such as interest or amounts from nonpatronage sources, received by the association from its operations in excess of costs and expenses shall, insofar as permitted by law and to the extent practicable, be allocated to its patrons on a patronage basis. . . . An operating loss shall be apportioned among the patrons during the year of loss so that such loss will, to the extent practicable, be borne by the patrons of the loss year on an equitable basis. (pp. 578–79)

Under these provisions, both patronage and nonpatronage sources of unallocated equity and the role of unallocated equity in absorbing operating losses would be eliminated.

According to Schrader, unallocated retained equity conflicts with the principle of service at cost because of the following reasoning:

> If there is unallocated equity on the balance sheet accumulated from past patrons or business not done on a cooperative basis and all current net margins are allocated to patrons, then current patrons are being served below cost. . . . If current margins are retained unallocated, we have the opposite situation, that is, service above cost. The "under" and "over" might offset each other for the group as a whole . . . but only by accident would these effects exactly offset each other at the individual patron level. Even so, somewhere at the start, a patron group was not served at cost. (1989b, pp. 119–20)

Similar logic applies to the use of unallocated earnings for offsetting losses. It is not even clear that use of unallocated equity is the best means of planning for and absorbing losses. Research by Junge; Brase; and Barton (1989a) indicates that the cash flow of individual patrons can be improved if a cooperative incurring a loss allocates it to patrons instead of retaining it. Although the impact on the cooperative depends on several factors, their research suggests cooperatives could benefit from exploring alternatives to writing losses off against unallocated reserves.

Table 1.—Comparison of Cooperatives and Patron-Owned Corporations

Function	Cooperative	Patron-Owned Corporation
Control	Voting on popular basis or in proportion to patronage.	Voting in proportion to common stock holdings.
Distribution of earnings	In proportion to patronage. Earnings usually excluded from corporate taxable income.	In proportion to stock holdings. Earnings included in corporate taxable income.
Retention of earnings	Most earnings allocated to individual patrons. Earnings that are not allocated to individual patrons are included in corporate taxable income.	Earnings not allocated to individual owners.
Equity appreciation	No mechanism for individual equity appreciation.	Owners share in equity appreciation through market.

Recent discussions by an IRS representative indicate that IRS may move to prohibit the accumulation of unallocated equity from patronage-source earnings by disallowing the patronage dividend deduction under Subchapter T of the Internal Revenue Code of cooperatives that do so. The rationale is that the retention of unallocated earnings violates the pre-existing legal agreement to return earnings to patrons according to patronage that a corporation must make in order to be "operating on a cooperative basis."

Comparison of Cooperatives and Patron-Owned Corporations

At this point, having discussed many of the financing issues and conflicts faced by producers and their cooperatives, it seems appropriate to consider an alternative that will be defined as the patron-owned corporation (POC). The comparison that follows is based on the assumption that there is a group of agricultural producers who are interested in selecting the best form of business organization in order to provide themselves with essential services. These producers are not interested in making investments outside their service area or in services they do not use. Thus, the owners and patrons of the business can be considered to be the same group.

The basic differences between a cooperative and a POC are summarized in table 1 for four functions: (1) control, (2) distribution of earnings, (3) retention of earnings, and (4) appreciation of individual equity shares. As will be shown, there are distinct differences between cooperatives and POCs in each of these four categories. However, some of the distinctions become somewhat ambiguous under close scrutiny.

Two differences with respect to control and the distribution of earnings are eliminated if the concept of proportionality is applied. In a cooperative, earnings are distributed in proportion to patronage, but if the provision of

equity is also in proportion to patronage, the distribution of earnings would be equivalent in a cooperative and a POC. Furthermore, under the concept of proportionality, voting rights would be held in proportion to patronage. Thus, the distribution of voting rights would also be identical in a cooperative and a POC.

A difference in how earnings are distributed occurs only to the extent that a cooperative deviates from the concept of proportionality. Most cooperative advocates would probably espouse the concept of proportionality and argue that ideally cooperatives should be financed in proportion to patronage. On the other hand, many cooperatives, for practical reasons, are willing to diverge from this ideal in order to allow patrons a gradual means of investing into the organization. However, a decision to provide this means is not implied by the cooperative form of organization but is based on the desire of producers. Thus, although the essential difference between the methods used by cooperatives and POCs in distributing earnings is based on philosophical differences, the effective difference between distributing earnings on the basis of patronage and on the basis of stock ownership is ultimately determined by practical considerations on the part of cooperatives.

In principle, cooperatives allocate retained earnings to individual patrons. However, this characterization neglects the current practice of retaining increasing proportions of earnings in unallocated form. Cooperatives may be seen as effectively having two alternatives for retaining earnings—retaining them in "cooperative" form as allocated equities excluded from corporate taxable income and "corporate" form as unallocated equity included in corporate income—although the latter may be subject to statutory limitations.

Finally, cooperatives generally have no mechanism for the appreciation of individual equity whereas the owners of POCs can participate in increases in the value of the firm by selling shares. The absence of a market for the resale of cooperative stock is based in part on the patron-owner relationship and the necessity of maintaining ownership in the hands of producer-patrons. Some cooperatives have internal exchanges for equity shares, but these generally are subject to restrictions and the ability of new members to purchase shares gradually over time. Also, they usually do not allow for the appreciation of individual equity shares. This is based more than anything on the basic concept of cooperatives—that earnings are returned to members in proportion to patronage and not stock ownership.

Nevertheless, significant inequities can result from the absence of a mechanism for allowing cooperative members to participate in increases in the value of the firm. Sporleder describes a situation facing successful pooling cooperatives. When marketing pools consistently yield returns greater than spot market prices, they may attract new members. Original members may believe that their initial investment of capital is partly responsible for the success of the organization. Thus, they may seek reward for their investment despite the cooperative principles of returns in proportion to patronage and the equal treatment of members. Sporleder documents several methods that have been used to address this problem. They include a base contract system designed to reward initial risk capital. It establishes a negotiable marketing right that is allocated to the original

members of the cooperative and can be resold to other growers. The return to the original members' equity is determined by the market for these negotiable rights.

Referring back to table 1, if we impose upon the cooperative organizational form the concept of proportionality, we are left with three significant differences between cooperatives and POCs. Cooperatives can generally exclude from their taxable income earnings distributed or allocated to patrons. However, as a result of the tax laws that provide this treatment, cooperatives may not be entitled to unrestricted accumulation of unallocated retained earnings. They also do not generally provide a mechanism for the appreciation of individual equity shares.

Case Studies

Various reasons, including financial pressure on members and the absence of a mechanism for individual equity appreciation, have led some cooperatives to partially or totally restructure themselves as investor-oriented firms. Several of these cases have been described by Schrader (1989a) in an earlier issue of this *Journal*. Two additional examples are discussed here. In the first, current earnings from patronage sources continued to be distributed to members on a patronage basis, but conversion of the cooperative to a stock corporation allowed members to participate fully in the appreciation in the book value of the firm. In the second, a canning plant was acquired by growers through formation of a stock corporation. Although ownership was initially held in proportion to patronage, this relationship was expected to erode through the independent resale of stock and marketing contracts.

Plante described the conversion of United Grocers, Ltd., a large and successful grocery supply cooperative. In 1978, United Grocers began to review its legal and financial structure in an effort to develop an equity base that would keep pace with growth and provide a means by which its members could share in the increasing value of the cooperative. As a result of extensive study, the organization decided to reincorporate as a for-profit stock corporation operated as a cooperative. Member equities were converted to common stock. Upon recapitalization, United Grocers began to buy and sell stock from its members based on its book value at the end of the most recent fiscal year. Each member store was required to hold a certain amount of common stock, based on its average purchases. Each member held one voting share of stock and as many nonvoting shares as required. The corporation was permitted to pay up to 50 percent of patronage dividends in common stock or notes and the balance in cash.

According to Plante, the conversion was extremely successful and has been emulated by several other grocery supply cooperatives. As a result of the organization's new structure, members were able to share in its nonmember and nonpatronage profits through the appreciation of the book value of their common stock. Members viewed the cooperative as an assured source of supplies at competitive prices and an attractive investment. In addition, members now had an incentive to encourage management to expand into related profitable businesses. By converting its members' equities into common stock, the company was able to strengthen its balance

sheet and invest in capital improvements critical to its growth. By requiring members to hold common stock according to their patronage, the equity held by members was in direct proportion to their purchases.

Some of the same concepts are discussed in the Harvard Business School case study of Suzy Bel, Inc. Suzy Bel was organized by a group of California tomato growers to acquire a canning plant. In establishing Suzy Bel, organizers sought to remedy perceived structural weaknesses in the cooperative form of organization. In particular, they were concerned about undercapitalization of cooperatives stemming from the lack of incentives for member investment and the absence of economic rewards for retired members whose capital was involuntarily retained on a nonearning basis.

Suzy Bel was organized using a corporate form of grower ownership dubbed the "third way." The organization differed from a cooperative in that its objective was identical to a stock corporation and profits were to be allocated to owners on the basis of capital invested instead of the value of annual tonnage throughput. It differed from a corporation because of the dual role of the producer-owners.

Organization as a stock corporation allowed growers to acquire equity ownership of the physical assets of the cannery and thus participate directly in the appreciation of these assets as well as the cannery's profits. Because profits were allocated on the basis of capital instead of throughput, organizers believed there would be a continual market for Suzy Bel stock. Each share of stock was accompanied by a 10-year marketing contract that entitled the grower to sell a certain tonnage annually to the canner at the prevailing market price. Growers were free to sell either their ownership shares or their marketing contracts independently of the other. Thus, they had the flexibility to continue their relationship with the organization either as a grower or owner.

Because of the dual producer-owner role of growers and the correspondence between stock ownership and planned tomato deliveries, the organization would seem to conform to most notions of a cooperative despite return on the basis of stock ownership and its organization as a stock corporation. However, given the absence of restrictions on the sale of both the stock and the marketing contracts, the organization would be expected to gravitate away from a cooperative in practice to a conventional investor-oriented corporation over time. If ownership and marketing rights were tied and their exchange limited to producers, the organization would meet most of the characteristics of the cooperative while providing for the appreciation of equity.

Conclusion

The essential difference between a cooperative and a POC is the means by which earnings are distributed to owners. If equity is held in proportion to patronage, no difference in the distribution of earnings would exist in practice—at least in the short term. In the long term, differences could occur because of an appreciation in the value of the organization's assets. Cooperatives that emphasize the distribution of earnings on the basis of patronage generally do not provide their patrons a mechanism for participating in the increased value of the organization.

The decision of which organizational form to choose depends on the fundamental orientation of the producer-owners. Producers who are primarily concerned about providing essential marketing and supply services at cost should prefer to have the organization's earnings returned as savings on the basis of patronage. Those whose principal concern is earning profits on their investment in the organization may find it advantageous to form a stock corporation.

For producers who choose to operate their businesses as cooperatives, the retention of unallocated earnings from patronage income is inconsistent with the decision to return savings on a patronage basis. It seems reasonable, however, to allow a cooperative to retain income not attributable to patronage. Return of these earnings would not constitute a reduction in cost but rather a distribution of profits unrelated to the provision of services. By retaining this income in an unallocated capital account, the cooperative could use the income to offset future losses that are not attributed to undercharging patrons.

Strong arguments can be advanced in support of the concept of proportionality. Under this concept, voting rights would be apportioned according to the risks assumed. Because risks are borne proportionally to patronage, voting would be tied to patronage as well. By adopting this practice, cooperatives might become more attractive to larger farmers, who in some situations are essential to business success.

Application of the concept of proportionality to financing has even more intuitive appeal. Most cooperative advocates would probably argue that ideally the costs associated with financing a cooperative should be borne in proportion to the benefits received. New members may need the opportunity to build their investments gradually until these investments are in line with their patronage. For members who are unable to put up their proportionate share of equity, the cooperative could provide temporary financing by charging interest on the underinvestment, or members could finance the capital needed through a commercial arrangement.

Support has also been expressed for a balance between the operational interests of active members and the ownership interests of inactive members. Too often cooperatives create an inequitable situation in which a sizable class of equity holders neither receives compensation nor has a voice in shaping the policies of the organization. Given current statutory restrictions, cooperatives are limited in what they can do to give these former members a voice in controlling the disposition of their equity investments. However, the practice of paying little or no return on patron equities appears to be largely the result of cooperative choice instead of legal constraints. At a minimum, cooperatives should be obligated to pay preferred dividends on the equities of former members to the extent they can, given current limits on dividend rates imposed by state laws. Requiring active patrons to contribute proportionately to financing would help cooperatives in redeeming the equities of former patrons or paying dividends on those equities.

References

Abrahamsen, Martin A. *Cooperative Business Enterprise.* New York: McGraw-Hill Book Co., 1976.

Baarda, James R. *State Incorporation Statutes for Farmer Cooperatives.* Washington, D.C.: USDA ACS Coop. Info. Rep. 30, Oct. 1982.

———. *Cooperative Principles and Statutes: Legal Descriptions of Unique Enterprises.* Washington, D.C.: USDA ACS Res. Rep. 54, Mar. 1986.

Barton, David G. "Alternatives for Handling Losses in Cooperatives." *Journal of Agricultural Cooperation* 4(1989a):54–67.

———. "Principles." In *Cooperatives in Agriculture*, ed. David W. Cobia, pp. 21–34. Englewood Cliffs, N.J.: Prentice Hall, 1989b.

Beierlein, James G., and Lee F. Schrader. "Patron Valuation of a Farmer Cooperative under Alternative Finance Policies." *American Journal of Agricultural Economics* 60(1978):636–41.

Bradley, Frank L. "A New Look at Cooperative Financing." *Cooperative Accountant*, Fall 1972, pp. 2–7 and 31.

Brase, Brian T. "Agricultural Cooperative Losses: Their Influence on Earnings Allocation." M.S. thesis, Iowa State University, 1985.

Brown, Philip F., and David Volkin. *Equity Redemption Practices of Agricultural Cooperatives.* Washington, D.C.: USDA FCS Res. Rep. 41, Apr. 1977.

Cobia, David W., et al. *Equity Redemption: Issues and Alternatives for Farmer Cooperatives.* Washington, D.C.: USDA ACS Res. Rep. 23, Oct. 1982.

Dahl, Wilmer A., and W. D. Dobson. "An Analysis of Alternative Financing Strategies and Equity Retirement Plans for Farmer Cooperatives." *American Journal of Agricultural Economics* 58(1976):198–208.

Dunn, John R. "Basic Cooperative Principles and Their Relationship to Selected Practices." *Journal of Agricultural Cooperation* 3(1988):83–93.

Engberg, Russell C. *Financing Farmer Cooperatives.* Banks for Cooperatives, 1965.

Fischer, Martin L. "Financing Agricultural Cooperatives: Economic Issues and Alternatives." Ph.D. thesis, University of Minnesota, 1984.

Frederick, Donald A. *Keeping Cooperative Membership Rolls Current.* Washington, D.C.: USDA ACS Coop. Info. Rep. 37, Jan. 1989.

Harvard Business School. "Suzy Bel, Inc." Boston: Intercollegiate Clearing House, 1979.

Jones, Bruce L. "Services at Cost through Patronage Refunds: An Alternative Approach." Paper presented at the annual meeting of the American Agricultural Economics Association, East Lansing, Mich., 2–5 Aug. 1987.

Junge, Cathy A. "Agricultural Cooperative Policy Issues Concerning Earnings Distribution under Conditions of Net Earnings and Losses." M.S. thesis, Iowa State University, 1983.

Knutson, Ronald D. "Cooperative Principles and Practices: Future Needs." In *Farmer Cooperatives for the Future*, ed. Lee F. Schrader and William D. Dobson, pp. 34–41. Dept. Agri. Economics, Purdue University, 1985.

LeVay, Clare. "Agricultural Co-operative Theory: A Review." *Journal of Agricultural Economics* 34(1983):1–44.

Murray, Gordon. "Management Strategies for Corporate Control in British Agricultural Co-operatives: Part 2." *Agricultural Administration* 14(1983):81–94.

Nourse, E.G. "The Economic Philosophy of Co-operation." *American Economic Review* 12(1922): 577–97.

Phillips, Richard. "Economic Nature of the Cooperative Association." *Journal of Farm Economics* 35(1953):74–87.

Plante, Leo V. "The Case for Converting Cooperative Member Investments into Common Stock." *Cooperative Accountant*, Spring 1982, pp. 12–15.

Robotka, Frank. "A Theory of Cooperation." *Journal of Farm Economics* 29(1947):94–114.

Royer, Jeffrey S. "Distributing Cooperative Benefits to Patrons." *Cooperative Accountant*, Summer 1982, pp. 17–28.

———. "Financial Impact of Mandatory Equity Programs on Farmer Cooperatives." *Agricultural Finance Review* 43(1983):30–40.

Royer, Jeffrey S., Roger A. Wissman, and Charles A. Kraenzle. *Farmer Cooperatives' Financial Profile, 1987*. Washington, D.C.: USDA ACS Res. Rep. 91, Sept. 1990.

Ryan, Robert J., Jr. "Building Equity for the 80s." *Cooperative Accountant*, Spring 1981, pp. 29–32.

Schaars, Marvin A. "Basic Principles of Cooperatives: Their Growth and Development." In *Agricultural Cooperation: Selected Readings*, ed. Martin A. Abrahamsen and Claud L. Scroggs, pp. 193–203. Minneapolis: University of Minnesota Press, 1957.

Schrader, Lee F. "Equity Capital and Restructuring of Cooperatives as Investor-Oriented Firms." *Journal of Agricultural Cooperation* 4(1989a):41–53.

———. "Putting the Service-at-Cost Principle into Perspective." In *American Cooperation 1989*, pp. 117–24. Washington, D.C.: American Institute of Cooperation, 1989b.

Snider, Thomas E., and E. Fred Koller. *The Cost of Capital in Minnesota Dairy Cooperatives*. Minnesota Agr. Exp. Sta. Bull. 503, 1971.

Sporleder, Thomas L. "Membership Policy Alternatives for Marketing Cooperatives." *Journal of Agricultural Cooperation* 3(1988):1–11.

U.S. General Accounting Office, Comptroller General. *Family Farmers Need Cooperatives—But Some Issues Need To Be Resolved*. Washington, D.C.: CED-79-106, July 26, 1979.

U.S. Department of Agriculture. *Legal Phases of Farmer Cooperatives*. Washington, D.C.: FCS Info. 100, May 1976.