AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

# The Risk Mitigation Aspects of Agricultural Cooperatives: *Reaction*

*Jeffrey S. Royer*
*University of Nebraska-Lincoln*

Professors Sporleder and Goldsmith have done a commendable job of employing several risk management paradigms as a framework for exploring the mitigation of producer risk by agricultural cooperatives. Their analysis is both meticulous and insightful. Consequently, I am not so much interested in critiquing their paper as I am taking this opportunity to discuss three topics related to the paper's purpose but beyond its scope. These topics are: 1) the conflicts between producer risk mitigation by cooperatives and the cooperative principle of service at cost; 2) the distribution of risks between producers and cooperative integrators under contract integration; and 3) the extension of producer ownership interest in marketing cooperatives and the concomitant extension of producer market risk.

## Conflicts Between Risk Sharing and the Principle of Service at Cost

Sporleder and Goldsmith do not fully explore the relationship between the mitigation of producer risk and the cooperative principle of service at cost. Instead, they apply Dunn's approach by which he distilled the various principles of cooperation into three *basic* principles: the *user-owner* principle, the *user-control* principle, and the *user-benefits* principle. All other traditional principles of cooperation, including "service at cost," are demoted to the role of *practices* that facilitate or support these three basic principles. Dunn's creative taxonomy and its economy are appealing. However, by considering risk mitigation as a practice in support of the user-benefits principle, Sporleder and Goldsmith circumvent the very real conflicts between producer risk mitigation by cooperatives and service at cost, which is both a traditional and *defining* principle of cooperation.[1]

Schrader, in a dissection of the service-at-cost principle, explicitly recognized that risk sharing can be at odds with service at cost. He mentioned marketing pools, averaging of earnings across product lines, and unallocated reserves as risk-sharing devices. According to Schrader, "The idea is that while service is not at cost each season, it will be over a period of years" (p. 122). He argued that use of these tools can be made to be consistent with the principle of service at cost by defining the purpose of the cooperative to include risk sharing.

Schrader discussed the accumulation of unallocated reserves as a method of stabilizing patron returns and avoiding the need for allocating losses that occasionally may occur in cyclical businesses. However, he observed:

> 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 unallocat-

> ed, 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 (pp. 119–20).

The Internal Revenue Service (IRS) frequently has appointed itself a guardian of the principles of cooperation in an effort to maximize income taxes paid by cooperatives. In the past, the IRS has been a strong opponent of *netting*—that is, combining a loss in one area of operation with earnings from another—arguing that netting is inconsistent with "operating on a cooperative basis." According to the IRS, operating on a cooperative basis implies that a loss must be borne entirely by the patrons of that unit and generally cannot be shared with patrons of other units (Royer, 1989). In 1985, Congress provided cooperatives explicit authority to net losses. However, Congress did not directly address some issues involving netting. For example, the IRS has maintained that extensive discretion over netting by a cooperative board of directors after the close of the cooperative's tax year violates the preexisting legal agreement to return earnings to patrons according to patronage that is necessary for an organization to operate on a cooperative basis.

In recent years, the IRS has suggested that it might move to prohibit the accumulation of unallocated reserves from patron-source earnings, again on the basis that it violates the preexisting legal agreement to return earnings according to patronage (Royer, 1992). These issues illustrate that conflicts between risk sharing and the principle of service at cost have not been fully explored or resolved and should not be dismissed.[2]

## Distribution of Risks Between Producers and Cooperative Integrators

Let us now turn to the risks of producers and integrators under contract integration and how the distribution of these risks may differ when the integrator is a cooperative (Royer, 1995). According to one of Professor Sporleder's earlier papers, it is important to understand the alternatives for coordinating exchanges within the market channel, particularly at the producer/first-handler level. In addition to affecting the efficiency of the marketing system and the competitive advantage of the firms within it, the exchange arrangement affects the degree of various risks to which firms are exposed and the distribution of risks between firms, including the vertical transmission of risks. At the producer/first-handler level, risk is involved in decisions concerning price, quantity, quality and the timing of delivery. In a contract integration arrangement, some managerial control is transferred from the producer to the integrator. Both the producer and integrator are able to decrease some risks although other risks may be increased.

### Producer Risks

Under contract integration, the producer bears some production risks, but price risks for the contracted commodity and most variable inputs are transferred to the integrator. The reduction in producer price risk is replaced by other risks, including risks of contract renewal, contract terms and contract negotiation. These risks include the risk that the integrator may default on agreements. Also, many production management and technology decisions are

transferred to the integrator. Thus, management quality and continuity provide additional risks for contract producers.

These risks probably are not as great if the integrator is a cooperative. Because a cooperative is owned by its producer-patrons, it is less likely that the cooperative will default on agreements or behave in an exploitive manner. Risks involving management decisions, quality and continuity also are less likely to be concerns to producers contracting with cooperatives because the producers maintain a means of affecting management decisions through the board of directors and its selection of managers.

### Integrator Risks

Contract integrators, particularly if they provide credit to producers, are exposed to risk from producers' actions. As the relationship with producers expands, this exposure increases, contributing to the moral hazard problem (Featherstone and Sherrick). Babb suggests that the risks to integrators may be substantial. Although contract cancellation and nonrenewal usually are considered producers risks, most hog contracts are annually based and can be canceled by either party. According to Babb, contract cancellation may represent a greater risk to the integrator and lender than to a contract producer who can continue production as an independent producer. Contract cancellation or loan default may suggest poor judgment by the integrator and can adversely affect its expansion or the willingness of financial institutions to make loans involving it. To reduce risk, the selection process must be managed carefully. Difficulties in identifying contract producers and producer characteristics may lead to an adverse selection problem (Featherstone and Sherrick).

A cooperative may have an advantage in locating and selecting qualified producers because of its close working relationship with members. However, adverse selection still may be a problem for a cooperative if it believes it has an inherent obligation to enter into a contract with any member who meets minimal business and financial standards. Cooperatives also may face entanglements with producers who are terminated due to poor performance because they are members of the cooperative and may have substantial equity investments in it. Terminated members may press for an immediate redemption of their equities, which can cause member relations problems and increase the cooperative's financial risk. Cooperative difficulties with terminated members have been fairly common in the contract broiler industry.

### Extension of Producer Market Risk in Marketing Cooperatives

Any discussion of vertical coordination by cooperatives should begin with an article by John Jamison entitled "Coordination and Vertical Expansion in Marketing Cooperatives," which appeared in the August, 1960, *Journal of Farm Economics*. Although this article is remarkably germane to current discussions of vertical coordination, it appears to have been largely overlooked by recent authors.

According to Jamison, as a cooperative integrates forward toward the consumer market by entering into processing, wholesaling and retailing activities, producers must extend their ownership in the product over a longer period. Consequently, producers must obtain additional operating capital and are exposed to an extension of market risk. This extension of producer ownership interest in the commodity is most apparent in pooling cooperatives, in which producers maintain title to the commodity until final payment concurrent with settlement of the

pool, after the commodity has been processed and sold.[3]

However, even when the cooperative pays cash for the commodity and takes title at delivery, the producer is subject to market risk (Royer, 1995). If the cooperative nets a margin on the commodity, the producer may receive a patronage refund. On the other hand, if the cooperative nets a loss, the producer may be subject to an assessment due to "overpayment" for the commodity. Although direct assessment of producers may not be a common practice, operating losses frequently are written off against member equities.[4] Even if they are not, losses can affect the timing of the redemption of equities held by the producer. Equities allocated in the current year are even subject to being written down by future losses.

Because of the extension of ownership interest, vertical expansion of the cooperative may be opposed by some producers, particularly younger or expanding producers, who prefer to receive fixed prices for their products at as early a stage as possible in the market channel (Jamison). Because of their reliance on debt financing, these producers must give close attention to the amount and timing of their cash receipts to meet fixed repayment schedules. An aversion to vertical expansion due to the increased need for operating capital and increased risk exposure is consistent with the preferences expressed by producers who enter into contract integration to ensure themselves a firm price and to shift market risk to the integrator.

Many producers may be more than willing to forgo the receipt of patronage refunds in return for a higher cash price. Payment of a higher cash price in lieu of a patronage refund also may be an attractive alternative for the cooperative. By terminating the cash exchange with the producer at the time of delivery and by financing integration through unallocated earnings instead of retained patronage refunds, the cooperative can reduce financial risk by achieving more control over its equity capital and eliminating producer pressure for redemption.

Data indicate that U.S. cooperatives are utilizing unallocated retained earnings to a greater extent, both in general (Royer, Wissman and Kraenzle) and in the context of integration. At least two cooperatives that have become increasingly active in contract integration currently deal with producers on a cash basis while retaining their earnings on these activities in unallocated form.

Although increased use of unallocated earnings may offer cooperatives some financial advantages, critics argue that it threatens member control and violates the principle of service at cost (Royer, 1992). At a minimum, dealing with contract producers on a strictly cash basis has potential for significantly redefining the nature of cooperatives and their relationships with members.

## Notes

*The author is Professor, Department of Agricultural Economics, University of Nebraska-Lincoln.*

1. One must take exception to Sporleder and Goldsmith's characterization of Dunn's approach as "conventional." Instead, it is *un*conventional while service at cost is "generally considered to be one of the key or fundamental principles of cooperation" (Schrader, p. 117).
2. Sample cooperative bylaws published by the U.S. Department of Agriculture in 1976 included provisions ensuring that the organization would operate on a service-at-cost basis, allocate nonpatronage earnings to patrons on a patronage basis, and apportion operating losses among the patrons of the loss year. More recent bylaws (Frederick) enable cooperatives to assign nonpatronage income to unallocated reserve accounts, prorate an operating loss in one department or division against the earnings of other

departments or divisions, and carry losses backward or forward to offset earnings in other years.

3. As Sporleder and Goldsmith suggest, the risk associated with the extension of ownership interest in a pooling cooperative is offset by the amelioration of risk by the averaging of spot prices during the season and the fact that price risk generally is less further down a marketing channel.
4. Frederick suggests that cooperatives may want to adopt a bylaw provision prohibiting their boards of directors from assessing members directly for losses, thereby preventing a negative impact on member relations.

## References


Babb, Emerson M. 1992. "Management and Financing of Vertical Coordination in Agriculture: Discussion." *Am. J. Agr. Econ.* 74:1238–1239.

Dunn, John R. 1988. "Basic Cooperative Principles and Their Relationship to Selected Practices." *J. Agr. Coop.* 3:83–93.

Featherstone, Allen M., and Bruce J. Sherrick. 1992. "Financing Vertically Coordinated Agricultural Firms." *Am. J. Agr. Econ.* 74:1232–1237.

Frederick, Donald A. 1990. *Sample Legal Documents for Cooperatives.* Washington, DC: USDA ACS Coop. Info. Rep. 40, May.

Jamison, John A. 1960. "Coordination and Vertical Expansion in Marketing Cooperatives." *J. Farm Econ.* 42:555–566.

Royer, Jeffrey S. 1989. "Taxation." *Cooperatives in Agriculture*, ed. D. W. Cobia, pp. 287–307. Englewood Cliffs, NJ: Prentice Hall.

_____. 1992. "Cooperative Principles and Equity Financing: A Critical Discussion." *J. Agr. Coop.* 7:79–98.

_____. 1995. "Potential for Cooperative Involvement in Vertical Coordination and Value-Added Activities." *Agribus.: An Intl. J.* 11:473–481.

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

Schrader, Lee F. 1989. "Putting the Service-at-Cost Principle in Perspective." *American Cooperation 1989*, pp. 117–124. Washington, DC: American Institute of Cooperation.

Sporleder, Thomas L. 1992. "Managerial Economics of Vertically Coordinated Agricultural Firms." *Am. J. Agr. Econ.* 74:1226–1231.

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