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Cornhusker Economics

Agricultural Economics Department

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## Dealing With Cooperative Losses

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# Cornhusker Economics

## Cooperative Extension

Institute of Agriculture & Natural Resources  
Department of Agricultural Economics  
University of Nebraska – Lincoln

### Dealing With Cooperative Losses

Market Report	Yr Ago	4 Wks Ago	8/2/02
<b><u>Livestock and Products,</u></b>			
<b><u>Average Prices for Week Ending</u></b>			
Slaughter Steers, Ch. 204, 1100-1300 lb Omaha, cwt .....	\$70.34	\$63.16	\$62.35
Feeder Steers, Med. Frame, 600-650 lb Dodge City, KS, cwt .....	*	*	82.00
Feeder Steers, Med. Frame 600-650 lb, Nebraska Auction Wght. Avg .....	104.51	89.63	90.63
Carcass Price, Ch. 1-3, 550-700 lb Cent. US, Equiv. Index Value, cwt .....	110.15	99.83	97.60
Hogs, US 1-2, 220-230 lb Sioux Falls, SD, cwt .....	52.00	41.00	36.50
Feeder Pigs, US 1-2, 40-45 lb Sioux Falls, SD, hd .....	*	17.71	17.06
Vacuum Packed Pork Loins, Wholesale, 13-19 lb, 1/4" Trim, Cent. US, cwt .....	123.70	109.76	105.11
Slaughter Lambs, Ch. & Pr., 115-125 lb Sioux Falls, SD, cwt .....	48.47	83.25	80.25
Carcass Lambs, Ch. & Pr., 1-4, 55-65 lb FOB Midwest, cwt .....	153.36	160.82	162.86
<b><u>Crops,</u></b>			
<b><u>Cash Truck Prices for Date Shown</u></b>			
Wheat, No. 1, H.W. Omaha, bu .....	3.01	3.49	3.86
Corn, No. 2, Yellow Omaha, bu .....	1.81	2.14	2.36
Soybeans, No. 1, Yellow Omaha, bu .....	4.77	5.36	5.58
Grain Sorghum, No. 2, Yellow Kansas City, cwt .....	3.52	3.96	4.43
Oats, No. 2, Heavy Minneapolis, MN, bu .....	1.43	2.29	1.86
<b><u>Hay,</u></b>			
<b><u>First Day of Week Pile Prices</u></b>			
Alfalfa, Sm. Square, RFV 150 or better Platte Valley, ton .....	102.50	112.50	105.00
Alfalfa, Lg. Round, Good Northeast Nebraska, ton .....	75.00	72.50	82.50
Prairie, Sm. Square, Good Northeast Nebraska, ton .....	105.00	95.00	117.50
* No market.			

Nebraska has about 80 farm supply and marketing cooperatives that provide over 75,000 member-producers with agricultural inputs and marketing services. As owners, these member-producers provide the equity to finance their local cooperative. Many of the local cooperatives in Nebraska are part of the federated cooperative system. That is, they invest in and become owners of regional cooperatives that offer grain merchandising services and supply wholesale inputs such as fertilizer, petroleum products and ag chemicals. As equity holders in regional cooperatives, local cooperatives are subject to both gains and losses on their investments in regionals. With the current bankruptcy reorganization of Farmland Industries, many local Nebraska cooperatives and their member-producers are preparing for a potential loss in their regional Farmland equity.

Distributing cooperatives' losses can be accomplished three ways: 1) decreasing unallocated retained earnings, 2) decreasing allocated patronage accounts, and 3) billing patrons for a cash payment based on patronage. The third alternative has negative cash flow effects on patrons that most cooperatives would prefer to avoid creating. Therefore, cooperative directors and managers typically must decide to distribute losses through reductions in retained earnings or allocated patronage accounts.

There are advantages and disadvantages associated with reducing retained earnings or allocated patronage accounts for both the local cooperative and its members. If the decision is made to allocate the loss to patrons' accounts, patrons could reduce their taxable income (the cooperative loss passed to them would typically be an ordinary operating loss) and therefore lower their cash outflow for taxes. However, patrons would lose the future payment of the allocated equity. If the loss is applied to retained earnings, the cooperative reduces its taxable income but maintains its commitment to retire the allocated patronage accounts. So, whether the cooperative retains the loss or passes it to patrons (by reducing allocated patronage accounts), a cash-flow tradeoff exists for both the cooperative and patrons.

We can examine hypothetical situations to demonstrate the cash-flow tradeoff by making some assumptions. First, assume that the loss (whether from a loss of regional equity or operational losses at the local cooperative) creates a net loss for the local cooperative. Second, profits and losses are allocated to patronage accounts as qualified written notices (qualified notices require that



the patron recognize the allocated retained patronage as taxable income and allows the cooperative to deduct it from income in the year of the distribution). We also assume that patrons invest in the cooperative through retained patronage refunds and equity is redeemed in a lump sum by age of patron or through estates.

Let's consider the case of a loss of \$1,000 on regional equity that will either be distributed as a reduction in retained earnings or allocated patronage. Our example cooperative has a 20 percent marginal tax rate and can gain a tax reduction in the next year by carrying the loss forward one year. For simplicity, our example cooperative has two patrons, Deb and Jack, with 20 and 5 years, respectively, until their equity is redeemed. Based on their patronage, the loss would be distributed equally to them. A discount rate of 8 percent is used as the cooperative's opportunity cost of capital. The patrons' discount rate is 10 percent. In addition to considering both the immediate financial effects and long-range impacts on the cooperative, directors and managers need to address two questions:

1. *Is the cooperative better off to retain or allocate the loss (without regard to the patrons' interests)?* If the present value, PV, (adjusted for time value of money) of the tax reduction to the cooperative from retaining the loss exceeds the PV of the reduction in equity redemption payments from allocating the loss, the cooperative is better off to apply the loss to the unallocated retained earnings (and vice versa). In our example, the PV of the cooperative's tax reduction (from retaining the loss) is  $\$185.19 [1,000 \cdot 0.20 \cdot (1 + 0.08)^{-1}]$ . The PV of the reduction in equity redemption payments is the sum of Deb and Jack's reductions:  $\$447.57 [(500 \cdot (1 + 0.08)^{-20}) + (500 \cdot (1 + 0.08)^{-5})]$ . In this example, the cooperative would be better off to allocate the loss to patrons (i.e., the PV of the reduction in redemption payments was larger than the tax reduction from retaining the loss). In the situation described here, allocating the loss will offer the higher PV for the cooperative at low marginal tax levels and short equity retirement periods.
2. *Are the patrons better off if the cooperative retains or allocates the loss (without regard to the cooperative's interests)?* If the PV of the tax reduction from the cooperative allocating the loss to patrons exceeds the PV of the amount equity redemption payments are not reduced because the cooperative retained the loss, patrons are financially better off if the cooperative passes the loss to them. Deb has a tax rate of 30 percent and can use the loss in the current year. The PV of Deb's tax reduction from the cooperative allocating the loss to Deb is  $\$150.00 [500 \cdot 0.3]$ . The PV of Deb's equity redemption payment reduction is  $\$74.32 [500 \cdot (1 + 0.1)^{-20}]$ . Therefore, Deb's PV is highest if the cooperative allocates the loss to her and she uses it to reduce her taxes. Jack's situation is different, however. He has had a loss in his operation in the past couple of years, will in the current year, and expects to in the future. As a result, his tax rate is zero and he is not able to defer the loss to another year. If the cooperative allocates the loss to him, the PV of his tax reduction is  $\$0 [500 \cdot 0]$ . The PV of the reduction in Jack's equity redemption payment is  $\$310.46 [500 \cdot (1 + 0.1)^{-5}]$ . Jack would prefer that the cooperative retain the loss and not reduce his allocated equity account. Patrons with lower tax rates and shorter equity retirement

periods will generally prefer the cooperative to retain the loss.

Cooperative management teams ultimately must decide whether to retain or allocate losses, despite differences in how patrons are affected. In most cases, some patrons will be better off with the decision made, while others will not be. Cooperatives may elect to use the number of patrons or number of dollars positively affected by each alternative to arrive at a decision.

Previous research that has examined cooperative losses conclude that, strictly from a financial standpoint, patrons are most often better off (as a group) if the cooperative allocates the loss and the cooperative itself generally prefers to allocate the loss. Cooperative directors and managers often elect to retain the loss, however, being concerned that negative patron reaction to an allocated loss may prompt them to reduce their business at the cooperative.

Cooperative management teams should consult their tax advisor and legal counsel before making the decision to retain or allocate a loss. Patrons also must carefully consider the implications of the cooperative's decision on their operations and seek financial advice as needed.

The information in this article is adapted from:

Barton, D.G. "Alternatives for Handling Losses in Cooperatives." *Journal of Agricultural Cooperation* 4(1989):55-67.

Brase, B.T. "Agricultural Cooperative Losses: Their Influence on Earnings Allocation." M.S. Thesis. Department of Economics, Iowa State University, Ames, IA. 1985.

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