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Property Rights Issues in Cooperatives

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Cornhusker Economics

Property Rights Issues in Cooperatives

Market Reports	Year Ago	4 Wks Ago	11-11-16
Livestock and Products,			
Weekly Average			
Nebraska Slaughter Steers, 35-65% Choice, Live Weight.	135.00	97.40	103.10
Nebraska Feeder Steers, Med. & Large Frame, 550-600 lb.	213.52	126.96	137.86
Nebraska Feeder Steers, Med. & Large Frame 750-800 lb.	183.32	132.73	128.01
Choice Boxed Beef, 600-750 lb. Carcass.	218.53	182.43	185.47
Western Corn Belt Base Hog Price Carcass, Negotiated	53.26	47.14	40.83
Pork Carcass Cutout, 185 lb. Carcass 51-52% Lean.	75.49	72.41	73.82
Slaughter Lambs, woolled and shorn, 135-165 lb. National.	155.62	150.90	142.05
National Carcass Lamb Cutout FOB.	360.61	356.94	352.40
Crops,			
Daily Spot Prices			
Wheat, No. 1, H.W. Imperial, bu.	3.94	2.81	2.66
Corn, No. 2, Yellow Columbus, bu.	3.39	3.08	2.94
Soybeans, No. 1, Yellow Columbus, bu.	8.06	8.95	8.91
Grain Sorghum, No.2, Yellow Dorchester, cwt.	5.66	4.80	4.50
Oats, No. 2, Heavy Minneapolis, Mn, bu.	2.57	2.65	2.85
Feed			
Alfalfa, Large Square Bales, Good to Premium, RFV 160-185 Northeast Nebraska, ton.	185.00	160.00	145.00
Alfalfa, Large Rounds, Good Platte Valley, ton.	75.00	68.75	67.50
Grass Hay, Large Rounds, Good Nebraska, ton.	77.50	67.50	65.00
Dried Distillers Grains, 10% Moisture Nebraska Average.	125.25	109.00	107.50
Wet Distillers Grains, 65-70% Moisture Nebraska Average.	51.13	41.00	41.75
* No Market			

Cooperative organizations (this includes clubs and professional partnerships) play an important role in the economy, often bridging the gap that exists between the purely public and the purely private in the provision of goods. This has been particularly true in agriculture, where cooperative organizations have emerged to deal primarily with market failures such as oligopsonistic pricing.

The collective nature of cooperative organizations creates two key property rights issues: the free rider problem and the horizon problem. In agricultural cooperatives free rider problems emerge in raising investment funds at formation and later for growth and expansion during operation; in both cases, members prefer to let others make the investment but to nevertheless have access to the benefits of the investment.

Horizon problems in agricultural cooperatives potentially arise when the period of time over which members have a claim on the benefits of an investment is less than the length of time over which the benefits are generated. The result of this horizon mismatch may be underinvestment in assets or investments in assets that generate short-run benefits and not the long-run benefits necessary to keep the cooperative efficient and viable.

Of course, the lower investment may also be a reflection of the free rider problem that was discussed above, making it difficult to identify the precise cause of underinvestment. This is particularly the case because, as shown by our research, the two problems are linked and interact in important ways. For instance, free riding under decreasing returns to size reduces the returns to coop-

erative investment, thus further exacerbating the horizon problem. And reducing the horizon of cooperative investments to make them more attractive to individuals with shorter time horizons leads to increased incentives for free riding.

Research published in the latest issue of the *Journal of Agricultural & Resource Economics* examines the impact of the horizon and free-rider problems on investment and patronage decisions and, in turn, on cooperative membership and member welfare. Capturing the interaction of these two property rights problems is critical in identifying the factors affecting individual decisions and welfare, and the conditions under which cooperative investments are undertaken when the potential for horizon and free-rider problems is present. A full understanding of the linkage between these two property right problems is also crucial for determining policies and strategies that can be used to address them.

The study offers new insights on the horizon and free-rider problems in cooperative organizations. Specifically, the study reveals that (i) the horizon problem need not necessarily lead to short-term cooperative investments, (ii) free riding is not necessarily a problem for cooperative organizations, (iii) the source of the horizon problem, namely different member time horizons, can help cope with the free-rider problem, (iv) a properly designed membership fee can address the free rider and horizon problems, and (v) the optimal membership fee depends on the cooperative's cost structure.

Our analysis shows that although individuals differ in their valuation of the perceived benefits from forming or patronizing the cooperative because of factors such as age, these differences in valuations also create an opportunity to cope with the free rider problem. Specifically, a member's time horizon determines whether that individual is part of a critical mass that must invest in the cooperative for it to begin operation. The study shows that this critical mass of members is made up of people with longer time horizons. As a consequence, at least part of the membership is provided with an incentive to cooperate precisely because of the existence of differences in members' time horizons.

While this critical mass of members will cooperate and invest in the cooperative under the right circumstances, the other members will find it optimal to free ride. If the cooperative exhibits decreasing returns, then free riding is detrimental to all members. One way of reducing the free rider problem is through the use of membership fees to members that are not part of the original critical mass. By equating the returns from investing in and patronizing the cooperative with those from patronizing alone, a properly designed membership fee eliminates the incentive to free ride and raises the benefits generated by the cooperative under decreasing returns to size.

Free riders, however, need not be bad for the organization and the original members. For instance, if the cooperative exhibits increasing returns to size, then free riding can benefit all members by lowering costs and creating greater benefits. Thus, allowing different members to pay different amounts to join the cooperative organization can be advantageous.

In addition to providing insights into the membership fee structure of cooperative organizations, our research shows that the impact of the horizon problem may differ from what is typically expected. While it is usually argued that the limited horizons of its members will lead to a cooperative undertaking projects that generate short-term rather than long-term projects, our study shows that this need not always be the case. The reason is that the individuals who decide to patronize and finance the cooperative are likely to have relatively longer horizons, with the result that the short-sightedness of the cooperative is attenuated to some degree. This result may be one reason why some cooperatives have been able to make long-term investments and, thus, remain competitive over time.

Cited article:

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